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The Journal

of the

Michigan State Medical Society

Published under the Direction
of The Council

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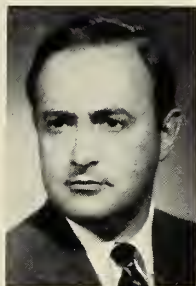
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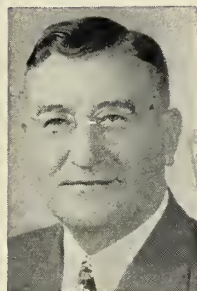
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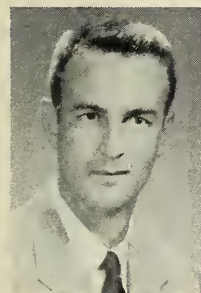
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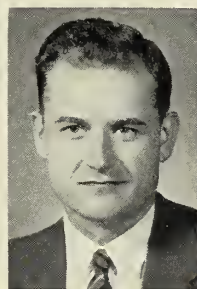
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(See pages 96-97.)

IMPORTANT HOUSE OF DELEGATES ACTIONS—1956

The MSMS legislative body, meeting in Detroit, September 24-25, 1956, adopted resolutions (a) urging establishment of departments of general practice in medical schools' curricula; (b) instructing that a committee be appointed to study the use of the word “clinic”; (c) instructing that a permanent advisory committee on fees be appointed; (d) objecting to Michigan's Attorney General's Opinion that the practice of psychotherapy is the practice of medicine; (e) urging expansion of medical school facilities at Wayne State University; (f) urging adequate funds to carry out civil defense; (g) directing The Council to build a new MSMS headquarters; (h) instructing that a committee be appointed to study excess beds in tuberculosis sanatoria; (i) urging total participation of Michigan M.D.'s in Michigan Medical Service; (j) urging more comprehensive prepaid medical care insurance plans

and Blue Shield plans for diagnostic out-patient services.

Resolutions re Michigan Medical Service

The more important resolutions concerning Michigan's Blue Shield were the following:

Resolution Urging Total Participation of M.D.'s in Michigan Medical Service

(Substitute resolution approved by 1956 MSMS House of Delegates)

Whereas, there is an apparent lack of full understanding and appreciation of the basic principles and philosophy of Michigan Medical Service, and

Whereas, the survival of the voluntary system of prepayment medical care depends on unity within this State Medical Society; therefore be it

RESOLVED, That the House of Delegates recommend to each county medical society that it include in its indoctrination of new members a thorough explanation of the principles, practices and objectives of Michigan Medical Service; and be it further

RESOLVED, That this State Medical Society, its members and officers, assist each county medical society in its campaign to see that Michigan Medical Service continues as the most successful medically-sponsored prepayment plan.

* * *

Resolution re Comprehensive Prepaid Medical Care Insurance Plan

(Substitute resolution approved by 1956 MSMS House of Delegates)

Whereas, it is the proper role of medicine to assume leadership in determining the type and form of prepaid medical care plans, and

Whereas, a prepaid medical care plan ideally should embody within it a sense of mutual responsibility on the part of the physician and on the part of the patient, and

Whereas, a medical care plan should preserve the traditional right of the patient to select the physician of his own choosing; therefore be it

RESOLVED, That the Michigan State Medical Society approve exploration with Michigan Medical Service of a comprehensive prepaid deductible and/or co-insurance contract and also the possibility of extension of the present contract; and be it further

RESOLVED, That the Speaker of this House of Delegates be authorized to appoint forthwith a special committee to accomplish the following:

A—Meet with the representatives of Michigan Medical Service to study and develop details and mechanisms.

B—Initiate, as a joint endeavor and in co-operation with Michigan Medical Service, necessary studies to ascertain what would best serve the public.

C—Prepare a complete report for presentation to the House of Delegates at its meeting in 1957 with the proviso that copies of this report shall be sent to each member of the House of Delegates by August 15, 1957.

* * *

Resolution re Michigan Medical Service Annual Report to MSMS House of Delegates

(Substitute resolution approved by 1956 MSMS House of Delegates)

Whereas, the Michigan State Medical Society established Michigan Medical Service with the intention of providing medical services on a voluntary basis through a prepayment plan, and

Whereas, the expansion of Michigan Medical Service
(Continued on Page 16)

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(Continued from Page 14)

has become a significant factor in the practice of medicine in the State of Michigan, and

Whereas, the members of the House of Delegates of the Michigan State Medical Society usually function as the legally qualified members of the corporation of Michigan Medical Service on the second day of their annual meeting and do not have a report submitted along with the reports of other Society activities as published in the Delegates' Handbook; therefore be it

RESOLVED, That the annual report of Michigan Medical Service be included in the Handbook for Delegates for informative purposes.

Dues Increase Eliminates Assessment

Two actions of the House of Delegates increased the dues by \$10.00, at the same time abolishing the \$10.00 assessment of 1956. The first was a resolution setting aside \$5.00 annual dues to build and equip a new MSMS headquarters building; the second was approval of the report of the Committee on Study of MSMS Financial Structure which included a \$5.00 dues increase to permit the continuation of the modern MSMS program at its current level:

Resolution re New MSMS Headquarters

(Approved by 1956 MSMS House of Delegates)

Whereas, increasing demands for service are being made upon the MSMS by the medical profession and the public, and

Whereas, such demands must be met by well-planned and effectively executed programs, and

Whereas, the administration of such programs must of necessity center in the Executive Office of MSMS, and

Whereas, present Lansing facilities for the Executive Office are already strained to the utmost and unless expanded shortly will hamper the efficient execution of MSMS programs, and

Whereas, it is reliably estimated that a proper headquarters can be built and equipped for an amount approximating \$300,000, therefore be it

RESOLVED, That a new MSMS headquarters be built and equipped in Lansing, Michigan; and be it further

RESOLVED, That for the building of this new headquarters the sum of \$300,000 be raised by:

1. The sale (at the proper time) of our present headquarters.

2. By the use of present building reserves.

3. By the increasing of dues in the amount of \$5 per year, beginning in the 1957 fiscal year, said increase in dues to be used only for the purpose of defraying the cost of building and equipping a new MSMS headquarters.

* * *

Conclusions of Committee on Study of MSMS Financial Structure

(Approved by 1956 MSMS House of Delegates)

1. The officers and professional staff of the MSMS are to be commended for their leadership in a program which is sound and well administered.

2. The part-time officers and full-time key professional staff are under- rather than over-paid. The AMA delegates and alternates as well as members of The Council, committees and others active in the Society make a very valuable contribution to the public and Society welfare at a significant personal sacrifice in most instances.

3. Evidence was not produced to justify a reserve equal to two years of Society operation.

4. The current \$45 dues and \$10 assessment has placed the Society in good condition financially, with a reserve anticipated for December of 1956, of approximately \$275,000 to \$300,000. During times of stress, such as the last depression or last war, this will permit Society operation at the current level for at least three to four years with a curtailment of 25 per cent of income. With a reasonable curtailment of expenditures, one year's operation without any income whatever is possible. By the same token, a reasonable increase in program is possible with this reserve to meet any possible emergency in the interval between meetings of the House of Delegates.

5. The \$10 assessment levied in 1956 should not be renewed.

6. A dues increase of \$5 is recommended to protect this reserve, offset higher costs, to permit a continuation of program at its current level, and to adequately reimburse part-time officers, key full-time staff and others.

HIGHLIGHTS OF THE EXECUTIVE COMMITTEE OF THE COUNCIL

Meeting of November 14, 1956

Eighty-nine items were presented to the Executive Committee of The Council at its November 14 meeting in Detroit. Those of chief importance were:

- **Discussion of matters referred to The Council** by the 1956 House of Delegates, including 22 resolutions, the reference committee's report on the Annual Reports of The Council, and the reference committee's report on the recommendations of the Committee to Study MSMS Financial Structure.

- **Medicare Program.** A report on the Washington, D. C., negotiation conference of October 24-25, was presented by Council Chairman Wiley and by Jay C. Ketchum, Executive Vice President of Michigan Medical Service. The Medical Advisory Committee of Michigan Medical Service was designated, as per the request of the Armed Services, to review specific cases (in the nature of a medical advisory committee); Michigan Medical Service was appointed as agent of MSMS for fiscal arrangements under the Medicare Program and the MSMS President was authorized to sign the medicare contract on behalf of the State Society; a letter explaining the Medicare Program, to be signed by President Walls, was authorized to be sent to all MSMS members, to be followed by additional detailed information.

- **President Walls** stated he attended a meeting of the Governor's Study Commission on Public Health in Lansing on October 26 (W. S. Jones, M.D., of Menominee is a member of this Commission) and presented a comprehensive report on health problems from the viewpoint of the Michigan State Medical Society.

- **Speaker K. H. Johnson, M.D., Lansing,** reported on a session of the Steering Committee to set up a meeting of the Citizen's Public

(Continued on Page 26)

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Michigan Medical Service

One of the most important phases of Michigan Medical Service operations—vital to Michigan doctors and MMS subscribers—is the work of the Wayne County Medical Advisory Board to Michigan Medical Society.

The board, representative of nearly every field of medicine, has for many years contributed invaluable service to members of the medical profession of Michigan and to MMS. In fact, its labors provide assurance to Michigan doctors that unusual and complicated medical and surgical cases receive careful professional consideration where precedent has not been established in the MMS payment schedule.

Just how the Advisory Board functions for MMS is important to all MMS participating doctors in the state. It is important to know what steps are taken before MMS makes payment to the doctor for any complex medical or surgical case requiring more than the usual amount of professional care or skill.

All cases reported on the Doctors Service Report forms, of course, go through the examination department of Michigan Medical Service. If, during this study, a doctor's service report shows any unusual type of work, it is referred to the MMS Medical Director, Dr. Dewey Moll. After close scrutiny by Dr. Moll and his staff, the cases requiring consideration by the Advisory Board are then presented by Dr. Moll to the Board for prompt attention. Cases are presented anonymously to the Board, with identity of the patient and the doctor undisclosed. Only if further information is needed on the case is the doctor's identity made known. The determination of fees by this Board must be in relation to the income limits of the contract carried by the subscriber and must be consistent with the other fee allowances in the \$2,500 or \$5,000 contracts.

"Fairness to the doctor and the patient is the paramount aim of the Board," Dr. I. S. Schembeck, Chairman, says. "It is our job to recommend to the MMS Board equitable payment of fees for specific cases. These recommendations for payment are reached only after thorough study by the Advisory Board of all the facts involved in each case presented—the extent of the surgery, length of time required to perform necessary procedures and any accompanying complications."

Dr. Schembeck points out that such recommendations for fees can be reached *only* if the doctor has submitted a complete report to MMS of the case in question. He emphasized that much time and expense can be saved by doctors and MMS if the doctors make every effort to submit reports to MMS describing in detail every aspect of their cases. To go a step further, it is

even recommended that for unusual cases the doctor send in a copy of his operative notes.

Completeness of reports, Dr. Schembeck explains, automatically expedites handling of complex cases—thereby hastening payment of the MMS fee to the doctor.

"We must know just what work the doctor has done for his patient before we can know whether payment for such procedure has been established in the MMS Schedule of Fees, or whether or not the doctor is entitled to further payment," Dr. Schembeck says. He explains that when the Board receives a report, incomplete in details, MMS must then write the doctor for further information, adding up to considerable delay before a decision can be reached. At times it has been necessary for MMS field representatives to make personal calls on the doctor to clear up facts in cases when reports were inconclusive.

However, a recommendation by the Advisory Board on a specific payment does not have to be final until the doctor indicates his approval. Should the participating doctor feel at any time that the payment recommended by this Advisory Board for his work is not satisfactory, it is his privilege to ask for a re-review of the case. The Advisory Board is always willing to reconsider any case, according to Dr. Schembeck—in fact, will consult with the doctor in person at a meeting of the Board if the doctor so desires. Also, cases which have been paid routinely without the aid of the Advisory Board will be reviewed by that Board if the doctor reporting so desires.

The Advisory Board, originally formed more than fifteen years ago to establish precedent fees, is still concerned with reviewing cases which are different from previous claims and are classified as out of the ordinary procedures.

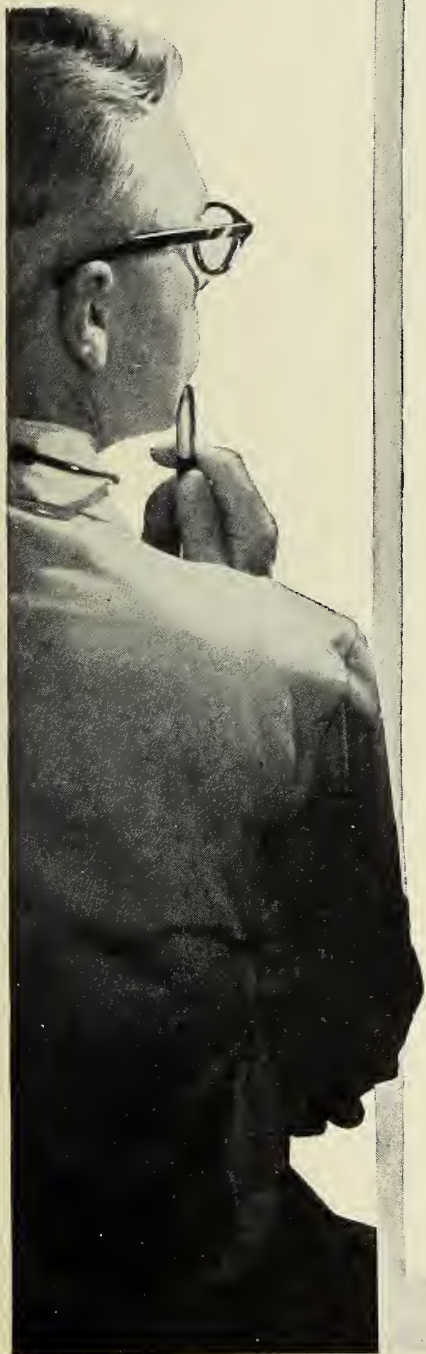
The Advisory Board has no authority to set fees, policies or practices of MMS, it can only recommend certain action. For instance, if an established fee for a particular procedure appears to be inequitable as part of the set Schedule of Fees, the Advisory Board may recommend to the MMS Board of Directors that such a fee should be reconsidered and changed as being too large or too small a payment for such services. The same action or recommendation may be made for new procedures as they appear. Actually, each individual doctor has this same right if he chooses to have a certain procedure reviewed for modification in the fee allowance.

A hard-working group, the Advisory Board meets two days each month, handling approximately 2,000 cases each year. Service by the Board members has always been without remuneration.

(Continued on Page 32)

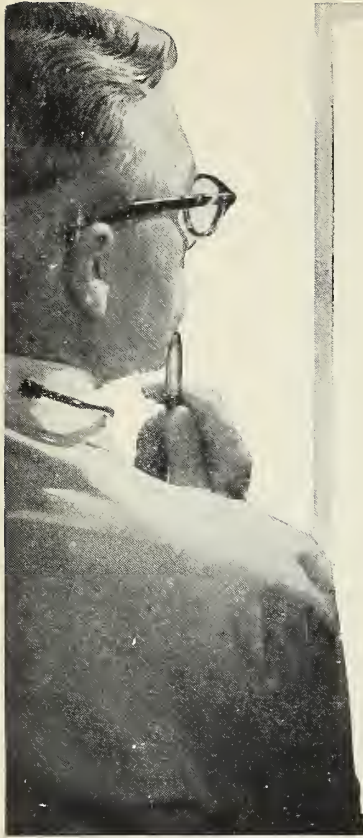
Doctor, would it

be helpful to you in your practice to know that there is a food available at reasonable prices in the stores the year round having these attributes:



1. High public acceptance as to flavor and palatability—billions eaten annually.
2. One of the best of the “protective” foods with a well-rounded supply of vitamins and minerals.
3. Low sodium—very little fat—no cholesterol.
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17. Useful in the management of diabetic diets.
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19. Belongs among foods useful in certain acute intestinal infections.
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21. Favorably influences mineral balance.
22. Useful in the management of ulcer diets.
23. One of the easiest foods to eat or prepare.

FOR THE NAME OF THIS FOOD, PLEASE TURN THE PAGE



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4. The nutritional story of the banana...
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HIGHLIGHTS OF THE COUNCIL

(Continued from Page 16)

Health Advisory Committee for December 5. Tuberculosis, mental health, local public health units, and urbanization were to be discussed at this citizen's meeting.

- **William Bromme, M.D.**, Detroit, was appointed as MSMS representative to the Second National Conference on Veterans Affairs, January, 1957, Chicago.
- **1957 Michigan Clinical Institute Press Relations Committee**: A. B. Gwinn, M.D., Hastings, Chairman, H. F. Dibble, M.D., Detroit; L. R. Leader, M.D., Detroit; J. J. Lightbody, M.D., Detroit; Ralph W. Shook, M.D., Kalamazoo; and C. L. Weston, M.D., Owosso.
- **Edward M. Vardon, M.D.**, Detroit, presented a Verifax (photographic reproducing machine) to the Michigan State Medical Society, which was accepted with high thanks.
- **B. L. Masters, M.D.**, Fremont, presented report on Study Conference for Chairman of State Rural Health Committees, held at Purdue University October 19-20; the report was received with high thanks.
- **F. E. Ludwig, M.D.**, Port Huron, and **H. A. Towsley, M.D.**, Ann Arbor, were appointed as members of MSMS Liaison Committee with University of Michigan.
- **Legal Counsel Lester P. Dodd** presented opinions on ten questions of legal import.
- **Report of Rheumatic Fever Co-ordinator Leon DeVel, M.D.**, Grand Rapids, was approved with thanks.
- **Public Relations Counsel** presented a report on the Gold Medal Award judging committee; Good Citizenship Get-Out-the-Vote Campaign; Professional Day of the 1957 Michigan Rural Health Conference; Hospital-Community Research Project of Michigan State University; the MSMS public relations library; copies of "Medicine and the Law" film series (AMA); and on the new M.D. placement pamphlet.
- **Committee Reports**. The following committee reports were presented: (a) Formation of American Association of Medical Assistants; (b) Committee on Arbitration, meeting of September 8; (c) Permanent Conference Committee, October 24; (d) Healing Arts Study Committee, October 25; (e) Geriatrics Committee, November 1; (f) Committee to Select Field Secretary, November 7; and (g) Committee Organization Meeting (for Chairmen), November 13.

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There is more pain relief in DONNAGESIC Extentabs than in codeine alone — codeine analgesia is potentiated by the phenobarbital present. In addition, phenobarbital diminishes anxiety, lowering patient's reactivity to pain.

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Heart Beats

THE MICHIGAN HEART ASSOCIATION SERVES THE PHYSICIAN

One of the major activities of the Michigan Heart Association is the support of cardiovascular research. The Association has awarded grants totalling \$164,000.00 to 27 scientific investigators in Michigan to carry out research studies into the baffling problems of diseases of the heart and blood vessels. The research work is being conducted in 8 medical institutions during the twelve month period ending June 30, 1957.

In addition to its own research program, E. A. Irvin, M.D., Dearborn, President of the Michigan Heart Association, points out that the MHA contributes to the national research support program of the American Heart Association. The national organization has allocated nearly \$1,873,000.00 for 311 grants-in-aid and fellowship awards during the same period.

\$80,686.00 of the research funds allocated by the Michigan Heart Association have been awarded from the Association's Memorial Fund. This fund was established at the request of many persons who have wanted an opportunity to provide a "living memorial" to the memory of a friend, relative or associate who has been afflicted with heart disease. Memorial contributions are used exclusively for heart research studies. The balance has been allocated from funds contributed to the Association by the people of Michigan through "United" fund raising campaigns in many Michigan communities.

The research investigators receiving funds from the Michigan Heart Association during the current year are as follows:

- Dean's Fund.....Wayne University
To enable part-time research investigators of proven ability to devote full-time to cardiovascular research.
- Dean's Fund.....University of Michigan
To enable part-time research investigators of proven ability to devote full-time to cardiovascular research.
- W. T. Beher, M.D.....Edsel Ford Institute
Study of Cholesterol Metabolism.
- J. B. Blodgett, M.D.....Grace Hospital
The Fundamental Problem of Exploring Satisfactory Means of Entrance and Exit through Walls of the Great Vessels and Heart Itself and Problems of Mitral Valve Regurgitation.
- D. F. Bohr, M.D.....University of Michigan
A Comparison of Some Basic Characteristics of the Circulatory System in Response to Renal Ischemic, Renoprival and Hormonal (DOCA) Hypertensions.
- A. J. Boyle, M.D.....Wayne University
Plasma Colloid Stability in Normal and Atherosclerotic Subjects.
- T. M. Brody, M.D.....University of Michigan
Mechanisms of Experimental Heart Failure.
- N. E. Clarke, M.D.....Providence Hospital
The Chemotherapy of Rheumatic Fever.
- F. D. Dodrill, M.D.....Harper Hospital
Mechanical Heart.
- I. F. Duff, M.D.....University of Michigan
Investigation of the Mechanism of Blood Coagulation with Special Reference to the Problem of Thromboembolic Disease.
- J. D. Fryfogle, M.D.....Mt. Carmel Mercy Hospital
Arterialization of the Coronary Sinus by Communication to the Left Ventricular Cavity.
- F. E. Greifenstein, M.D.....Wayne University
Study of the Contractile Force of the Heart.
- Cameron Haight, M.D.....University of Michigan
Temporary Occlusion of a Pulmonary Artery as Means of
(A) Evaluation of the Anticipated Cardiovascular Responses to Pneumonectomy.
(B) A Study of the Pulmonary Vascular Tree by Injection of Contrast Material Beyond the Point of Occlusion.
- H. K. Hellem, M.D.....Wayne University
The Investigation of the Effects of Exercise and Commonly Used Cardiovascular Drugs on Myocardial Blood Flow and Metabolism in the Human Subject.
- T. B. Hill, M.D.....Kent County Health Department
Incidence of Streptococcal Infections in a Rural School with Study of the Carrier State.
- S. W. Hoobler, M.D.....University of Michigan
Atherosclerotic Vascular Disease.
- J. J. Jasper, M.D.....Wayne University
The Study of Serum Surface Tension in Atherosclerosis.
- C. G. Johnston, M.D.....Wayne University
Prosthetic Replacement or Correction of Valvular Lesions.
- J. A. Johnston, M.D.....Ford Hospital
Studies in Rheumatic Fever.
- C. R. Lam, M.D.....Henry Ford Hospital
Experimental Cardiovascular Surgery.
- B. M. Lewis, M.D.....Wayne University
Diffusion and Distribution Characteristics of the Lung in Heart Failure.
- Y. Morita, M.D. and L. T. Iseri, M.D.....Wayne University
Metabolic Aspects of Cardiorenal Diseases.
- Jan Nyboer, D.Sc., M.D.....Harper Hospital
The Evaluation of Electrical Impedance Plethysmography and Displacement Ballistocardiography.
- Prof. F. L. Rights.....Wayne University
Etiology of Acute and Chronic Pericarditis and Myocarditis.
- Walter Seegers, M.D.....Wayne University
Blood Coagulation: Purification of Inhibitors and Mechanism of Their Action.
- D. E. Szilagyi, M.D.....Henry Ford Hospital
An Investigation of the Use of Plastic Vascular Prostheses in the Replacement of Long and Narrow Arterial Segments.
- J. L. Wilson, M.D.....University of Michigan
Investigation of the Effects of Cyanotic Heart Disease and Its Relief on Cerebral Function.

(Continued on Page 32)

"Highly Effective in Pneumonia"

In one investigation, 75 adult patients with bacterial pneumonia were treated with erythromycin. In his summary, the clinician reported: "It is concluded that erythromycin is highly effective in the treatment of pneumonia due to gram-positive bacteria."²

This, of course, is only one of many reports showing the effectiveness of ERYTHROCIN against coccic infections. You'll get the same good results (nearly 100% in common, bacterial respiratory infections) when you prescribe ERYTHROCIN. **Abbott**



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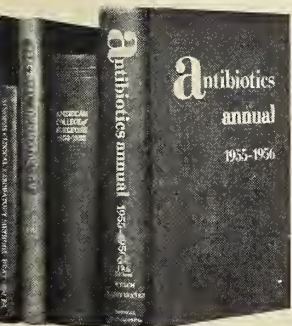
STEARATE

"No Serious Side Effects Occurred"

After a study of 171 patients treated with erythromycin, the investigator wrote: "No serious side effects occurred with prolonged therapy or with doses up to 8 Gm. per day in the severe infections."¹

Actually, ERYTHROCIN stands on a remarkable record of safety. After four years, there's not a single report of a severe or fatal reaction attributable to erythromycin. In addition, you'll find allergic manifestations rarely occur. *Filmtab* ERYTHROCIN Stearate (100 and 250 mg.), in bottles of 25 and 100. **Abbott**

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1. Romansky, M.J., et al., Antibiotics Annual 1955-1956, p. 48,
2. Waddington, W. S., Maple, F. C., and Kirby, W. M. M., A.M.A. Archives of Internal Medicine, 1954, p. 556.

THE MICHIGAN HEART ASSOCIATION SERVES THE PHYSICIAN

(Continued from Page 28)

Through MHA and AHA research projects, new findings in the cardiovascular field are made known immediately to the physicians of the state so that they may better serve their patients and their communities.

Professional education is also an important Heart Association objective and a large selection of professional education and information materials are available to the physician with an interest in cardiovascular disease. Through these materials, the Michigan Heart Association endeavors to aid the physician in continuing his self-education in the field of cardiovascular disease, and to assist him in the care of the patient with cardiovascular disease.

These professional materials include films, slides, heart models, three-dimensional cardiovascular views, phonograph records, clinical charts, pamphlets and books.

The literature runs the gamut from the technical "Nomenclature for Diagnosis of Peripheral Vascular Disease" to a well-written, easily read booklet which the physician can give to his patients, entitled "Have Fun—Get Well."

Some of the film and slide titles include: "Congenital Malformations of the Heart," "Surgical Correction of Mitral Stenosis" and "Roentgenograms of the Heart and Great Vessels."

Another valuable item available to the physician is a set of three Cardiac Kits. These kits consist of slides and phonograph records which explain the slides. A printed explanation is included for more detailed reference, or in case a phonograph is not available. The three subjects covered in the kits are: "The Role of the P-A Film of the Chest in Cardiology" by William R. Christensen, M.D., Professor of Radiology, University of Utah; "The Prevention of Rheumatic Fever" by Gene H. Stollerman, M.D., Assistant Professor of Medicine, Northwestern University; "Functional Pathology of Occlusive Coronary Disease," by Jesse E. Edwards, M.D., Professor of Pathologic Anatomy, Mayo Clinic and Mayo Foundation.

Various publications about cardiovascular disease are regularly available to physicians. They include: "Modern Concepts of Cardiovascular Diseases," "Heart Research Newsletter" and "The American Heart." These publications are sent to all physicians who are members of the Michigan Heart Association as part of their membership. Professional journals available are *Circulation* and *Circulation Research*.

A new two-volume Electracardiographic Test Book, containing photographs of electrocardiograms and questions of electrocardiographic interpretation, is now available. The electrocardiograms from the book are available also on slides.

In addition to all of these professional materials, a vast amount of literature, films and exhibits are available to the physician for his use with patients or the lay public in general. A free booklet on all professional education and information aids available may be secured by writing to the Michigan Heart Association, Doctors' Building, 3919 John R, Detroit 1, Michigan.

REFRESHER COURSE

Plans for a refresher course in "Cardiology for the Family Physician" have been completed by the Michigan Heart Association, in co-operation with Wayne State University and the Michigan Academy of General Practice. The course will consist of five full-day sessions (8:30 a.m. to 5:15 p.m.) from April 22 through April 26, 1957, incorporating both bedside rounds and lectures.

A registration fee of \$25.00 will be charged, and the course has been approved for twenty-five hours credit in Category I. For full details, contact either the Michigan Heart Association at the address listed above or Dean, College of Medicine, Wayne State University, 1401 Rivard Street, Detroit.

MICHIGAN MEDICAL SERVICE

(Continued from Page 18)

ation. The President of the Wayne County Medical Society appoints the Board each year. Every effort is made to see that nearly all fields of medicine are represented in the group. Also, should a specific case require medical knowledge beyond the scope of the Board members, advisory consultants are called upon for assistance.

Currently, plans are being considered for developing other Advisory Boards in metropolitan areas across the State through which MMS hopes to gain closer contact with and better understanding by the local medical groups. Kent County Medical Society has appointed an Advisory Board to function as does the Wayne County Board but with attention to cases stemming from Kent and other nearby counties. If work of the Kent County group becomes successful in this effort, it is hoped that other County Medical Societies will establish similar Advisory Boards to Michigan Medical Society.

BIRTH RECORDS

The first year when 100,000 births were reported in Michigan was 1941. Present indications are that the year 1956 will see more than 200,000. The maternal death rate has gone down one half during the same period—63 to 34—a great tribute to the efforts of maternal health committees and concentrated efforts of health agencies.

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both mind
and
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*for the average
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- well suited for prolonged therapy
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- no blood dyscrasias, liver toxicity, Parkinson-like syndrome or nasal stuffiness
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Indications: anxiety and tension states, muscle spasm.

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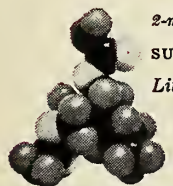
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Foundation for Eye Care

Announcement was made November 15, 1956, of the establishment of the National Medical Foundation for Eye Care, a non-profit scientific and educational institution, incorporated in New Jersey. The Foundation has been organized by ophthalmologists of the country to provide American ophthalmology with an agency to present to the public generally and to fellow physicians pertinent information on the care and treatment of the eyes.

Ralph O. Rychener, M.D., Memphis, Tennessee, is president of the Foundation; Edwin Forbes Tait, M.D., Norristown, Pennsylvania, vice president, and Charles E. Jaeckle, M.D., East Orange, New Jersey, secretary-treasurer.

Members of the Board of Trustees, in addition to the above named, are: Alson E. Braley, M.D., Iowa City, Iowa; Frederick C. Cordes, M.D., San Francisco, California; Paul Chandler, M.D., Boston, Massachusetts; J. Spencer Dryden, M.D., Washington, D. C.; Harold F. Falls, M.D. Ann Arbor; Everett L. Goer, M.D., Houston, Texas; Erling W. Hansen, M.D., Minneapolis, Minnesota; A. D. Ruedemann, M.D., Detroit; Barnet R. Sakler, M.D., of Cincinnati, Ohio, and Derrick Vail, M.D., Chicago, Illinois.

In a special statement announcing the Foundation's establishment, Dr. Rychener declared:

"American ophthalmologists have long recognized an urgent need for an organization whose principal function will be to interpret the basic professional and scientific standards of good eye care for the American people, both to our fellow physicians and to the people whom we serve.

"The National Medical Foundation for Eye Care will seek to serve the public interest by helping the people to understand the educational qualifications and the professional functions of physicians specializing in ophthalmology, and the functions of related technical and ancillary personnel who assist them. The Foundation will also endeavor to keep our colleagues in the medical profession informed concerning the problems confronting ophthalmology in its efforts to fulfill its

mission as a member of the team of recognized medical specialties serving the American people."

Dr. Rychener revealed that the Foundation is now enrolling its charter membership, and he invited all ophthalmologists and other physicians interested in eye care to become charter members of the Foundation.

Applications are available through Dr. Charles E. Jaeckle, secretary-treasurer, at 136 Evergreen Place, East Orange, New Jersey. The Foundation is establishing an administrative office in New York City, and will make available an Affiliate Membership for persons other than doctors of medicine who are interested in aiding the purposes of the Foundation.

The object and purpose of the Foundation is to advance the public welfare by:

1. Gathering receiving, assembling and studying information relative to eye care.
2. Fostering and/or engaging in investigations and research in all aspects of eye care.
3. Sponsoring studies of educational, socio-economic and scientific factors affecting eye care.
4. Issuing reports and otherwise disseminating information relative to eye care to the general public and to members of the medical profession and ancillary workers.
5. Promoting the conservation of vision and the prevention of blindness through the wider dissemination of knowledge of the eye, its defects, disfunctions and other diseases and their relation to general health.
6. Promoting a more effective utilization of the scientific knowledge of ophthalmology and the other related branches of medicine.
7. Generally performing any act, related to the foregoing, designed to present to the public generally and the medical profession, all pertinent information on the care and treatment of the eyes.

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plus a new maximum in
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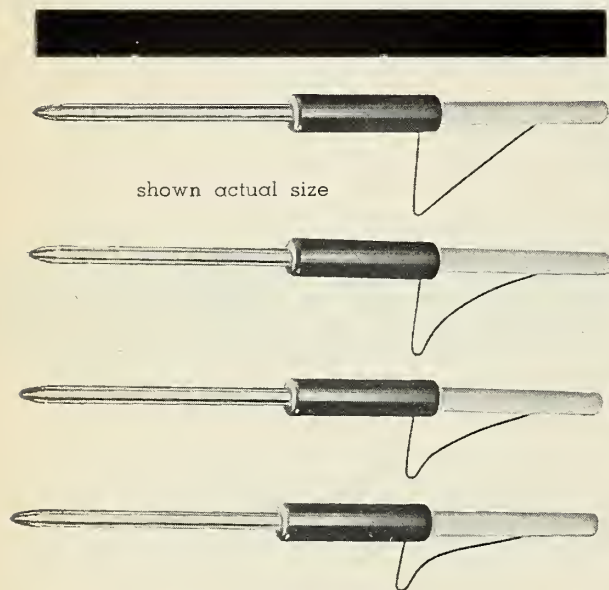
A savory mint flavor that adds the further certainty of acceptability to antibiotic therapy, particularly for that 90% of the patient population treated in the home or office where sensitivity testing may not be feasible, and where pleasant flavor can make the difference between prescription adherence and laxity.

Sigmamycin for Oral Suspension

is available in 2 oz. bottles containing 1.5 Gm. of Sigmamycin (oleandomycin 500 mg., tetracycline 1 Gm.). When reconstituted each 5 cc. teaspoonful contains 125 mg. of Sigmamycin (42 mg. of oleandomycin as the phosphate salt with tetracycline amphoteric equivalent to 83 mg. of tetracycline hydrochloride).

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cervix
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HAWKINS* technic

Built by Birtcher of the finest materials to exactly meet the requirements of the technic of M. C. Hawkins, Jr., M.D., of Searcy, Arkansas, described in his paper "Re-Evaluation of Conization of the Cervix," published in *Southern Medical Journal*.

**Described in his paper which will be sent on request*

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PREVENTION OF RHEUMATIC FEVER

Thirty-three persons died in Michigan in 1955 from rheumatic fever and 849 from chronic rheumatic heart disease, according to information from the Vital Statistics Division, Michigan Department of Health. This is a rate of 122 per million per year, out of a total death rate of approximately 7,000 per million—one death in sixty.

A report of two years' experience with a five-year study of 400 children receiving prophylaxis at Irvington House, which was made to the American Heart Association in Cincinnati on October 29, 1956, would indicate that prophylaxis still leaves much to be desired. Ninety-five streptococcal infections were discovered by throat culture in eighty-seven of the patients, the rate of incidence being one in six patient years. Thirteen recurrences of acute rheumatic fever, representing 15 per cent of those who had one or more streptococcal infections, occurred in spite of prophylaxis, and the recurrence rate for the entire group was one per forty-four patient years.

By method of prophylaxis, there were thirty-six streptococcal infections and nine rheumatic fever recurrences among children who had received 200,000 units of penicillin orally one-half hour before breakfast, forty-four streptococcal infections and four rheumatic fever recurrences among the group receiving sulfadiazine, 1.0 grams daily in a single dose, and fifteen streptococcal infections and no rheumatic fever recurrences in the group receiving 1.2 million units of benzathine penicillin G intramuscularly at monthly intervals.

The Rheumatic Fever Control Committee, Michigan State Medical Society, recommends prophylaxis of one of the above types for duration of life or until newer knowledge makes the method obsolete. The Michigan Department of Health provides benzathine penicillin G for anyone upon requisition, and the Michigan Crippled Children Commission provides payment of a fee from trust funds for its administration to children who have been the subject of a court order under the Crippled or Afflicted Children's Acts, upon the request of their family doctor of medicine.

ROBERT E. FISHER, M.D.
Medical Co-ordinator
Rheumatic Fever Program

Of the total AMA budget, not more than 2.5 per cent is spent on legislative efforts. The breakdown on spending: 3 per cent to reserves, 9 per cent to supply members with information, 19 per cent for public information, 6 per cent for socioeconomic activities, 60 per cent for publication of journals and other scientific activities, leaving only 3 per cent for Washington Office, Law Department, and legislative activities combined.



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- * *Sterilizes urine in 1 to 3 days*
- * *Relieves burning in minutes*
- * *Effective in 93-98% of cases*

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The original Azo-Sulfa Formula*
Antibacterial • Analgesic

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Phenylazo-diamino-pyridine HCl—acts solely on the urogenital mucosa; provides prompt relief from burning, pain and frequency.

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Sulfacetamide—eliminates mixed infections rapidly because of its unusual solubility in acid urine common to bacterial invasion of the urinary tract. No renal damage, concretions or anuria.

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sulfid B-A

Antibacterial • Analgesic • Antispasmodic
—the dual activity of SULFID with the well-known antispasmodic effect of natural belladonna alkaloids.

FORMULAE:

SULFID—Each coated tablet contains: Phenylazo-diamino-pyridine HCl, 50 mg. and Sulfacetamide, 250 mg., in bottles of 100 tablets.

SULFID B-A—Each coated tablet contains the SULFID formula with natural belladonna alkaloids, 0.065 mg., in bottles of 100 tablets.

COLUMBUS

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PR REPORT

THE 1957 LEGISLATURE AND HEALTH

As forecast in the December issue of *THE JOURNAL MSMS*, the Legislature came to Lansing on January 9, appointed officers, organized committees and settled down for what appears to be a six-month session. If recent pronouncements from the Governor and key legislative leaders are borne out, medical care, public health and general welfare will be foremost on the lawmakers' agenda.

The 1956 House of Delegates, recognizing that a changing world needs new and amended laws, recommended action by the Legislature relating to psychotherapy, Wayne State University College of Medicine (expanded teaching facilities), regulation of ambulance operation, and more civil defense funds.

The MSMS Legislative Committee (L. A. Drolett, M.D., Chairman) met in Lansing, January 10, to finalize these recommendations into its 1956 program and to review legislation anticipated from other sources, some of it perennial, some new.

Of the hundreds of newspaper clippings that monthly come into the PR department from all parts of the state, two recent ones bear reporting here. In a November editorial, the *Detroit News* states, "We hope that next year's Legislature will give Michigan children the protection of a compulsory immunization law."

This attitude was prompted by the recent disclosure that 17,000,000 perishable doses of Salk vaccine were going begging and by the November diphtheria outbreak in Detroit. While the editorial deals primarily with polio and diphtheria, the tenor of the article indicates that *all* immunizations are desired on a compulsory basis. A factor not discussed was whether this all-inclusive program would be paid for by the state, the federal government or by the individual family head who today voluntarily protects his own children from the uninoculated carrier.

In the same week, the *Battle Creek Enquirer and News* editorially takes cognizance of findings and recommendations of the Governor's Study Commission for the Aged and a Legislative Advisory Council on Problems of the Aging. Here is what the editorial said:

"The legislative group, in a public hearing in Lansing, took note of demands for state aid in the fields of *housing and employment*. The Governor's Commission recommended that state aid be given the aged for *medical care, including glasses, hearing aids and dentures*.

"How much dependence and separate maintenance should government provide? How much even of security? In our free enterprise system, the more free enterprise and private initiative the better.

"Study sponsored by government? Excellent. Care for needy cases by government? Of course. But taking over the lives of the elderly with public housing projects, state medical care and government-made employment? Certainly not.

"The Legislature can help make older lives more meaningful. It also has an obligation to do so in a practical manner."

NEW FIELD SECRETARY APPOINTED



John K. Pardee, East Lansing, has been named to the public relations staff of MSMS, replacing Warren F. Tryloff in the Detroit office, who was transferred to the executive office in Lansing in December. As Field Secretary, he will co-ordinate liaison between the State Society and the county medical societies in southeastern Michigan and the

"thumb" area and will schedule the radio and television public service activities for MSMS in that part of the state.

Mr. Pardee, a political science graduate of Michigan State University, comes to the State Society with a wide experience in the health, insurance and public relations fields. "Jack" now lives in East Lansing with his wife (an MSU dietitian) and their two children and is a member of Peoples Church there.

His fraternal associations include the Masons, Lions, Sigma Chi, Alpha Phi Sigma and the American Legion.

Mr. Tryloff is being promoted after two and a half years in Detroit to become Associate Public Relations Counsel, succeeding A. DeWitt Brewer who resigned in August to become a Vice President with the Mt. Clemens Federal Savings and Loan.

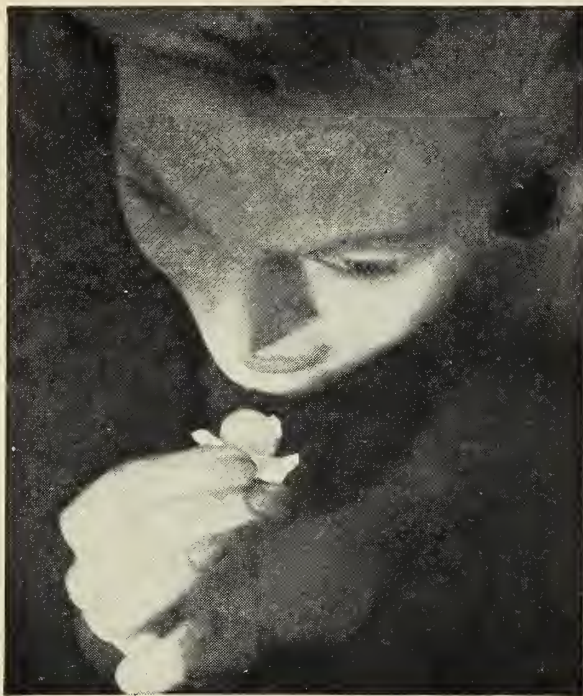
ANOTHER OFFICE OF MEDICAL EXAMINER ESTABLISHED

Members of the Dickinson County Medical Society and county morticians worked together in successful support of the November 6 referendum in that county which abolished the office of county coroner and created the office of county medical examiner. The measure was adopted by a three-to-one margin.

The question was placed on the ballot by action of the County Board of Supervisors at the request of morticians, who later sought and gained medical society support.

Until 1953, only Oakland, Genesee and Kent

(Continued on Page 42)



Tastiest way to dissolve sore throat symptoms



(HYDROCORTISONE-BACITRACIN-TYROTHRIN-
NEOMYCIN-BENZOCAINE TROCHES)

Adult or juvenile, your patients with sore throats will welcome a course of HYDROZETS. These newest Merck Sharp & Dohme troches offer anti-inflammatory, anti-infective and analgesic properties that promptly alleviate distressing mouth or throat irritation whether caused by infection, mechanical injury or allergic reaction. And HYDROZETS taste so good, it's hard to believe they're medicine.

Formula: Each HYDROZETS Troche contains—2.5 mg. 'HYDROCORTONE' to reduce pain, heat and swelling; 50 units Zinc Bacitracin, 1 mg. Tyrothricin and 5 mg. Neomycin Sulfate to combat gram-positive and gram-negative bacteria; and 5 mg. Benzocaine for rapid soothing analgesia.

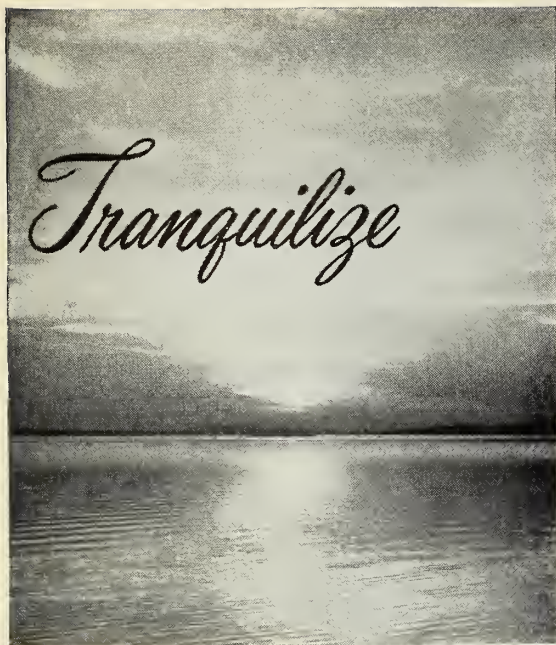
Other indications: As adjunct therapy in aphthous ulcers, acute and chronic gingivitis and Vincent's Infection.

Supplied: Vials of 12 troches.



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- Soothes the central nervous system, produces calmness without hypnosis.
- Non-toxic, non-cumulative, non-addicting, no known contraindications.
- Does not impair mental or physical function.
- Orally effective within 30 minutes for sustained action up to 6 hours.
- Economical.

Indications: Tension, nervousness, anxiety and muscular spasm.

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In ten brief years, Blue Shield enrollment has burgeoned from less than 2 million to more than 37 million people, and about 45 million more have bought some form of cash indemnity coverage for medical-surgical expense through private insurance companies.

While the job of providing voluntary medical care protection to the entire American people is about half done, the demand for this protection is practically universal.

Studies have shown that people in the lowest income brackets are not enrolled in as large proportions as those in the medium income groups. Enrollment among the aged, the self-employed and the rural population is also under par.

Blue Shield's purpose is to help the profession meet its responsibility to the *entire* community, and the Plans are now giving particular attention to these segments of the population whose potentialities for profitable underwriting do not generally appeal to insurance companies operated for private profit.

It's no longer a question whether people are going to have voluntary prepayment for medical care. The real question, today, is whether Blue Shield can do the job satisfactorily and in good time.

And the answer lies with the doctor. American medicine has accomplished a modern miracle in the achievements of Blue Shield to date. The job that remains to be done will require as much imagination, as much bold action and devotion to the task as was needed to get Blue Shield off the ground ten years ago. To do this job, Blue Shield needs the help and guidance of every American physician.

ANOTHER OFFICE OF MEDICAL EXAMINER ESTABLISHED

(Continued from Page 40)

Counties, under a special law, had been permitted to establish a county medical examiner system. After passage of the State Medical Examiner Law that year, at the urging of MSMS, it became possible for other counties to adopt this system if voters approved the local change.

Since January 1, 1954, when the law took effect, Wayne, St. Joseph, Allegan, Wexford, Ottawa, Hillsdale, Van Buren and Marquette Counties have adopted the new system.

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Clinical Evaluation of Sintrom (G-23350), A New Oral Anticoagulant

By J. A. Polhemus, M.D., W. S. Wilson, M.D.,
P. W. Willis III, M.D., J. R. Gamble, M.D.,
D. R. Griffin, M.D., P. E. Hodgson, M.D., and
I. F. Duff, M.D.
Ann Arbor, Michigan

ALTHOUGH anticoagulants are of definite therapeutic value in a variety of conditions, the ideal agent has yet to be found. Wright⁷ has defined the ideal anticoagulant as having the following properties:

1. Therapeutically active orally or parenterally without untoward reactions.
2. Rapid action.
3. Predictable response to a given dosage in a patient and between different patients.
4. Prompt termination of its action after discontinuance of the drug or after the administration of a nontoxic antagonist.
5. The activity of the drug can be determined by a simple test.

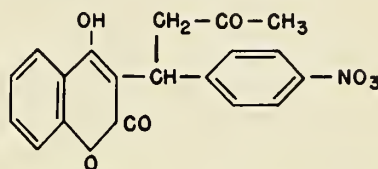
The purpose of this report is to present our experience with Sintrom (G-23350), an oral anticoagulant, and to compare it with the ideal anticoagulant and with anticoagulants which have been in use for some time.

Sintrom, nitrophenyl acetyl-ethyl-4-oxycoumarin (Fig. 1) is a member of the coumarin series.

From the Departments of Internal Medicine and Surgery of the University of Michigan Medical School. This study was assisted by grants-in-aid from the Michigan Heart Association and the H. R. Rackham School of Graduate Studies of the University of Michigan. Financial support and Sintrom were also generously supplied by Geigy Pharmaceuticals. Supplies of Mephyton were made available through the courtesy of Merck & Co., Inc.

Presented on Heart Day, Michigan Clinical Institute, Detroit, March 8, 1956. Heart Day was supported by the Michigan Heart Association.

It is a stable compound supplied in 4 mg. scored tablets which are odorless and tasteless and which are administered without difficulty.



SINTROM, NITROPHENYL ACETYL-ETHYL-4-OXYCOUMARIN

Fig. 1.

Extensive animal experimentation² has shown Sintrom to be effective in lowering the prothrombin level and to be free of toxicity even after continuous administration for two to three months. Reports from European clinics³ indicate that this drug is effective in man and is free of untoward reactions.

Sintrom was given to seventy patients, fifty-two of whom had a normal pretreatment prothrombin concentration (80 per cent or above—Quick method) and are therefore suitable for purposes of comparison with results obtained in other patients treated with indandione derivatives as Dipaxin, Hedulin or Indon (PID) and coumarin derivatives as Dicumarol and Tromexan.

Diagnoses of the patients receiving Sintrom are listed in Table I.

TABLE I.
DIAGNOSES OF PATIENTS TREATED WITH SINTROM

Diagnosis	Number of Patients
Thrombophlebitis—without emboli	
Spontaneous	16
Postoperative	5
Carcinoma	4
Pulmonary emboli	
Associated with thrombophlebitis	5
Without apparent thrombophlebitis	2
Myocardial infarction	13
Basilar artery thrombosis	1
Congestive heart failure (prophylactic)	6
Total	52

dose or the total amount of Sintrom required to reduce the prothrombin concentration to the therapeutic levels (less than 30 per cent) regardless of time was 58 mg. The average patient reached therapeutic levels in two and one-third days. Maintenance dosage, usually started on the third or fourth day of treatment, ranged between 6 to 16 mg. with an average of 11 mg. daily. The maintenance dose was found to vary greatly from patient to patient and in the same patient from day to day.

TABLE II. COMPARISON OF THE RESULTS OBTAINED WITH SINTROM, DIPAXIN, PID, DICUMAROL AND TROMEXAN

	Sintrom	Dipaxin	PID	Dicumarol	Tromexan
Patients treated (normal initial prothrombin)	52	64	133	122	50
Mean effective dose	58 mg.	63 mg.	685 mg.	646 mg.	3120 mg.
Therapeutic effect achieved:					
Within 24 hours	2%	5%	18%	14%	12%
Within 48 hours	60%	67%	95%	55%	82%
Average (days)	2.3	2.3	1.3	2.3	2.1
Average days to recover to 40% or above	1.5	4.1	1.5	5.0	2.5
Incidence of prothrombin:					
Escape above 30%	81%	38%	17%	37%	90%
Fall below 10%	27%	10%	10%	15%	20%
Incidence of bleeding	17%	11%	6.5%	11%	9%
Total patients treated	70	104	200	303	100

All patients were evaluated before anticoagulant therapy by members of the anticoagulant team who then followed the patients daily and determined the amount of the drug to be given. A base line prothrombin concentration was obtained prior to instituting therapy and daily prothrombin determinations (Quick method) were made while the patient continued to receive Sintrom and following its discontinuance until the prothrombin concentration had risen above 40 per cent. The aim of therapy was to maintain the prothrombin concentration between 20 per cent (33 seconds) and 30 per cent (22 seconds) of normal. A single daily dose was usually employed, as no difference was noted when the drug was given twice daily. When the clinical condition warranted an immediate effect on the blood-clotting mechanism, intravenous and/or subcutaneous Heparin was given.

The results obtained with Sintrom and the previously evaluated anticoagulants are recorded in Table II.

The usual initial dose of Sintrom was 28 to 32 mg. followed by 16 to 24 mg. on the second day. The larger doses were usually given to patients of greater weight, but no definite relationship between dosage and body weight was observed. The average total dose for the first forty-eight hours was 46.5 mg. The mean effective

After the therapeutic range had been achieved, forty-three of the fifty-two patients, or 81 per cent, escaped at one time or another above the 30 per cent level, and fourteen patients, or 27 per cent, were below the 10 per cent level on at least one occasion. There was a total of 525 days of maintenance therapy during which the prothrombin concentration was above 30 per cent on 143 days, or 27 per cent of the time, and below 10 per cent on eighteen days, or 3 per cent of the time. Following the discontinuance of therapy the average time for the prothrombin concentration to return to above 40 per cent was thirty-six hours.

Bleeding, limited to mild epistaxis and hematuria occurred in nine patients, or 17 per cent. Though this is slightly higher than found with the other agents, the number of patients observed was not large enough to make it statistically significant, and it is doubtful if bleeding is more apt to occur with Sintrom therapy. As noted with other anticoagulants, bleeding usually occurred when the prothrombin concentration was 10 per cent or below. The hypoprothrombinemia induced by Sintrom was rapidly corrected by oral or intravenous Vitamin K₁ (Mephyton) (Fig. 2).

No evidence of toxicity was noted though therapy was continued in one patient for fifty-three

days. Pre-treatment and post-treatment renal and liver function studies, consisting of creatinine clearances, urinalyses and Bromsulfalein excretions, were performed in two patients without

parallel the decrease in prothrombin activity as reflected by the one stage (Quick) and two stage methods. No significant change in Factor V could be detected.

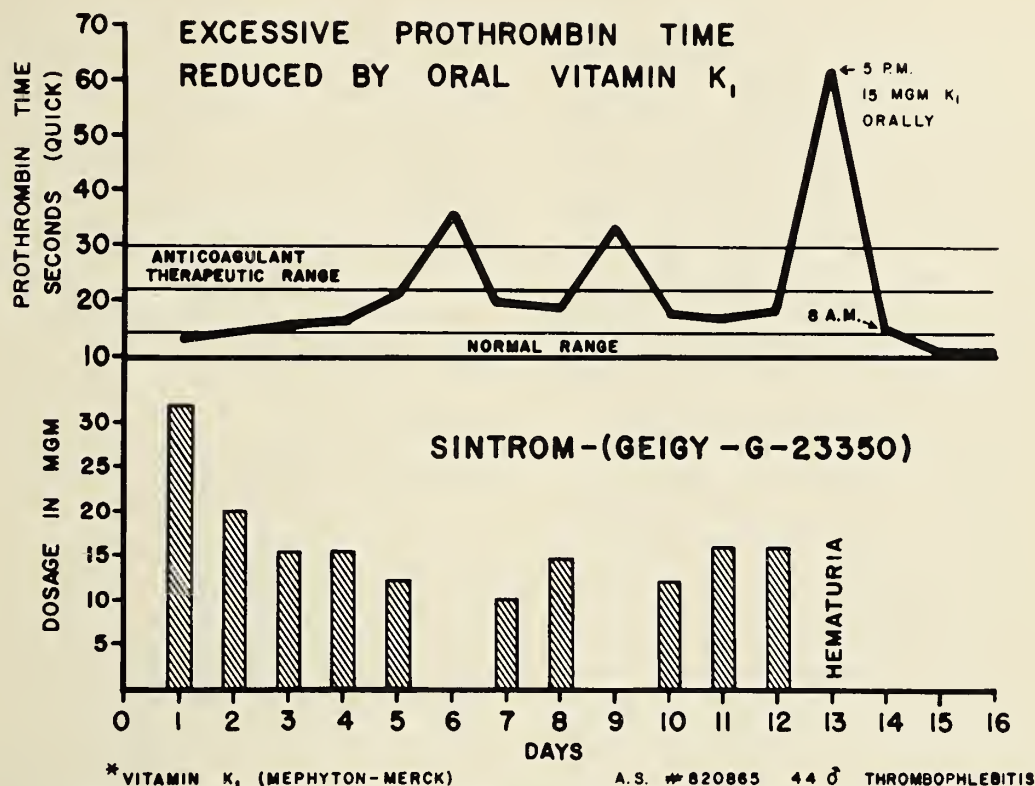


Fig. 2. The excessive prothrombin time resulting from Sintrom was rapidly reversed by 15 mg. of vitamin K₁ orally with prompt cessation of hematuria.

evidence of change. No absolute resistance to Sintrom was noted.

In addition to daily Quick one-stage prothrombin determinations, several patients had simultaneous prothrombin evaluations by the Owren one-stage P and P method,⁴ the Ware modification of the Owren one stage method⁵ and the two stage method of Ware and Seegers.⁶ As previously reported by Duff,¹ when the prothrombin level was within therapeutic range (10 to 30 per cent) by the Quick one-stage and two-stage methods, the corresponding values by the Owren and Ware methods were definitely below the recommended safe level. The Quick method of prothrombin determination, which is the simplest and most widely used, though not specific, was found to be satisfactory for control of Sintrom.

Two patients had daily Factor V (Proaccelerand) and Factor VII (Proconvertin) determinations. A fall in Factor VII activity was noted to

Sintrom was the most potent anticoagulant evaluated, milligram for milligram. Though it probably is more rapid in action than Dicumarol and similar to Dipaxin, it is not as rapid as Tromexan and PID. The return to normal prothrombin levels following the discontinuance of drug administration would appear to be as rapid with Sintrom as with any of the other anticoagulants. Unfortunately in our experience there does not seem to be a uniform response to a specific dosage from patient to patient nor in the same patient. This characteristic makes selection of a maintenance dose difficult and probably accounts for the high incidence of escape from therapeutic levels.

Summary

1. Sintrom, an oral anticoagulant, was given to seventy-two patients. The results in fifty-two of

(Continued on Page 56)

Diuretics in the Treatment of Congestive Heart Failure

By Yoshikazu Morita, M.D.
Detroit, Michigan

ONE of the cardinal manifestations of congestive heart failure is edema. The raw materials for this edema, chiefly sodium and water, are provided by the abnormal retention, by the kidney, of these substances. This retention is due to two factors: decrease in the glomerular filtration rate, and increase in the tubular reabsorption of sodium and water. These two factors are more or less operative in all cases of congestive heart failure, and are secondary to the failure of the heart to maintain an adequate circulation.

The primary effort in the therapy of congestive heart failure, then, should be directed toward the correction of the damaged pump. Unfortunately, the types of heart disease for which we have a specific cure are few, indeed. Commisurotomy for mitral stenosis, thiamin for beriberi heart disease, subtotal thyroidectomy or therapeutic doses of radioactive iodine for thyrotoxic heart disease are examples of specific corrective measures. For the majority of cases of heart failure, digitalis is a nonspecific but highly effective medication to improve the efficiency of the failing myocardium. These specific measures plus digitalis, then, constitute the primary weapons against congestive heart failure; their use usually improves the circulation sufficiently to reverse the mechanisms which caused the edema, resulting in diuresis.

Frequently, however, a direct approach to the elimination of the excess sodium and water is made. This may be accomplished in two ways: reducing the intake of sodium, and promoting the excretion of sodium and water. The absorption of sodium into the body may be reduced by low-sodium diets and by the use of cation-exchange resins. The increased removal of edema fluid may be accomplished by mechanical means,

such as abdominal paracentesis,¹ or by diuretics, which promote increased renal excretion of edema fluid. In most patients, diuretics permit a more rapid recovery from congestive heart failure than would be possible without their use, and in some patients, diuretics are necessary if any improvement at all is to be noted. The diuretics which are commonly used in the therapy of congestive heart failure are shown in Table I.

TABLE I. COMMONLY AVAILABLE DIURETICS IN THE TREATMENT OF CONGESTIVE HEART FAILURE

I.	Organic mercurials
A.	Parenteral
B.	Oral
II.	Acetazolesamide (Diamox) [®]
III.	Aminometramide (Mictine) [®]
IV.	Ammonium chloride
V.	Aminophylline

The injectable organic mercurial preparations are the most effective of the diuretics. Oral mercurial compounds, Diamox[®] and Mictine,[®] are less effective but useful compounds, since they may be administered by mouth. Ammonium chloride and aminophylline are not very potent diuretics in themselves, but are important adjuncts in the optimal use of mercurials, and will be discussed more in detail below.

Organic mercurial preparations act by depressing the reabsorption of chloride, sodium, and water by the renal tubules, thereby producing an increase in the urinary excretion of these ingredients of edema. The exact biochemical locus of action is still in doubt.^{2,3} It usually promotes a greater excretion of chloride than of sodium;^{4,5} the result frequently is a depletion of chloride from the body. There is also an increased excretion of acid in the urine. These two actions lead to the development of hypochloremic alkalosis, which is the most common electrolyte disturbance produced by the use of a mercurial diuretic. Its recognition is important in that it results in a refractoriness to further injections of the same compound. This refractoriness may be the result of the decrease in the chloride load filtered by the glomeruli,⁶ and/or of the shift of intracellular pH toward alkalinity.⁷ Correction of this

From the Departments of Medicine, City of Detroit Receiving Hospital and Wayne State University College of Medicine, Detroit, Michigan.

Supported in part by grants from the National Institutes of Health (H-1471) and the Michigan Heart Association.

Presented on Heart Day, Michigan Clinical Institute, Detroit, March 8, 1956. Heart Day was supported by the Michigan Heart Association.

electrolyte disturbance may be simply made by the administration of ammonium chloride. Enteric coated tablets, in the dose of 2.0 grams four times a day, should be given for two to three days.

A second type of electrolyte disturbance sometimes attributed to the use of mercurials is hyponatremia. The appearance of this condition is usually due in part to other factors, such as markedly restricted salt intake, extrarenal salt loss, and internal shifts of electrolytes, and it is difficult to blame the diuretic alone. Mild hyponatremia of about 125 to 130 mEq. per liter does not usually prevent an adequate response to mercurials, provided the chloride level is not low. Severe hyponatremia of less than 120 milliequivalents per liter may reflect an actual deficit of total body sodium, as may be the case in a patient who has been eating little and receiving frequent injections of mercurials. Physical examination of such a patient would reveal evidence of dehydration and possibly collapse, or of normal hydration. Replenishing the sodium supply may improve the clinical picture almost immediately. The following formula may be used as a guide to determine the amount of sodium to be given to raise the plasma level by a given amount. Six-tenths milliequivalent of sodium should be given for each kilogram of body weight to raise the plasma sodium level by 1 milliequivalent per liter. If it is desired to raise the plasma sodium level in a 70 kilogram man by 10 milliequivalents per liter, $0.6 \times 70 \times 10$ or 420 milliequivalents of sodium should be given. The sodium may be given chiefly as the chloride, bicarbonate or lactate, depending upon the relative deficits of bicarbonate and chloride in the plasma. It is advisable to proceed cautiously when administering large amounts of sodium; an attempt to correct the plasma sodium level completely to normal in one step should not be made. It is suggested that about one-half of the amount needed for complete restitution be given as the first dose. Further doses may be given if a good clinical response occurs, and incomplete correction of the hyponatremia is found. A patient with congestive heart failure, who still has moderate to marked edema and who has severe hyponatremia, probably does not have a deficit of total sodium, but actually has an excess of total body sodium. In the extracellular fluid, the excess of water, however, is relatively greater than the

excess of sodium, resulting in hyponatremia. The giving of sodium to such a patient is very much like giving an additional weight for the left hand to a man who is carrying a heavy package in his right hand. The added burden, by restoring better balance, may result in more efficient carrying ability; however, there is the danger that the man may not be able to lift the total load at all! In patients with congestive heart failure, the infusion of hypertonic saline may result in a temporary increase in urinary output of water and sodium; however, usually the net loss of edema is nil.⁸ Frequently, patients who develop this type of electrolyte disturbance are critically ill, and the giving of hypertonic saline does not prevent a continuing downhill course.⁹ It is possible that in such patients the hyponatremia is a reflection of decreased osmolarity of the intracellular fluid, and therefore not amenable to correction by the addition of sodium to the extracellular fluid. If it has been decided to give sodium to the edematous patient with hyponatremia, the amount of sodium required should be calculated from the above formula. Since water is already present in large excess, the intake of water must be kept at a minimum; the sodium should be given intravenously, slowly, as a hypertonic solution, such as 5.8 per cent saline, which contains 100 milliequivalents of sodium per 100 ml.

A third type of electrolyte disturbance which may develop during mercurial therapy is hypopotassemia. Under certain conditions, mercurials may inhibit the tubular secretion of potassium.^{4,10} However, in most patients with congestive failure, there is an increase in potassium excretion. This increased excretion is not very marked in most patients. Hence, in a patient who is eating normally, marked potassium depletion does not occur. Nevertheless, even a modest loss of potassium in a patient who is fully digitalized may lead to cardiac manifestations of digitalis intoxication,¹¹ such as frequent ventricular premature beats. This is due to the opposing effects which potassium and digitalis exert upon myocardial function.

During the development of congestive heart failure, there is usually a negative potassium balance.²² In subjects in whom this deficit becomes very large, perhaps due, in part, to poor intake of food, a marked decrease in intracellular potassium occurs. Extracellular sodium may

migrate into the cellular space under such conditions, resulting in hyponatremia. In such cases, the hyponatremia cannot be corrected until the intracellular potassium deficit is remedied.¹²

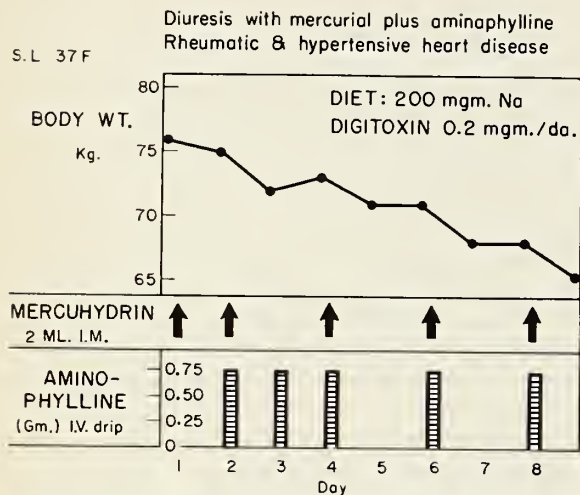


Fig. 1. Diuresis produced by the combined use of a mercurial diuretic plus aminophylline.

Where potassium lack is deemed to be clinically significant, potassium chloride, enteric coated, should be given in a dosage of 2.0 grams three to four times daily until the deficit is corrected.

Before discussing a plan for the use of mercurial diuretics, the value of aminophylline as an adjunct to mercurial diuretics should be discussed. When given parenterally, aminophylline has two effects on the kidney: first, it increases renal plasma flow and glomerular filtration rate,⁸ both of which are usually depressed in congestive heart failure; and, secondly, it inhibits tubular reabsorption of sodium. The first is by far the more important factor. Since filtration is the first step in the production of urine, a diminution of this function, such as occurs in congestive heart failure, hinders the removal of sodium and water and, thus, of edema, by the kidneys. Of the diuretics commonly used, aminophylline is the only one which increases glomerular filtration. Figure 1 illustrates the use of this drug. The patient was a woman with hypertensive and rheumatic heart disease, with severe congestive heart failure. It is to be noted that with aminophylline alone or with mercurial alone, there was no loss of edema, as indicated by daily body weight measurements; however, the combination of the two drugs resulted in a good diuretic response repeatedly. The increase in glomerular

filtration, brought about by the aminophylline, plus the inhibition of tubular reabsorption of salt and water, accomplished by the mercurial, resulted in diuresis, where either one alone failed.

Table II is a suggested regimen for the use of injectable mercurial diuretic in congestive heart failure; it embodies the principles of its use outlined above.

TABLE II. SUGGESTED REGIMEN FOR PARENTERAL MERCURIAL DIURETIC

- I. 2 ml. intramuscularly every third morning.
- II. If response, as measured by increase in urinary volume and/or decrease in body weight is poor, give enteric coated ammonium chloride, 2.0 grams four times a day, for three days preceding each dose of the mercurial.
- III. If the response is still poor, give aminophylline, 0.5 to 1.0 gram, in 300 ml. of 5 per cent glucose in water intravenously over a three-hour period, starting simultaneously with the dose of mercurial.

In more urgent cases, mercurial injections may be given oftener than indicated; however, more frequent injections are more likely to lead to electrolyte disturbances, resulting in refractoriness, and may result in mercurialism if renal function is markedly impaired. Aminophylline need not be given as an infusion, but may be given in one 0.5 gm. dose intravenously about one to two hours after the mercurial. If intravenous injection is not feasible, aminophylline, 0.5 gm. in 2 ml., may be administered intramuscularly together with the mercurial in the same syringe¹³; however, this is not a recommended procedure, since intramuscular injections of aminophylline are painful. Orally administered aminophylline is poorly absorbed, and therefore has little beneficial effect. It should be stressed again that the patient should be at rest, reclining, for several hours to obtain a maximal glomerular filtration rate and maximal diuresis.

The procedure just outlined is designed for the initial treatment of a patient with congestive heart failure. For maintenance, less strenuous measures may suffice. Many patients may remain edema-free with digitalis, adequate rest, salt restriction, and one of the oral diuretics.

Oral mercurial preparations are not as effective as their injectable counterparts.^{14,15} Moreover, there is a higher incidence of side reactions, notably gastrointestinal disturbances, which attend their use.¹⁶ Gastrointestinal manifestations include stomatitis and gingivitis, nausea, vomiting, abdominal pain, and diarrhea. Dermatitis, albuminuria and hematuria also have been reported. Mercurials are also prepared as rectal supposi-

ories. Their efficacy is of the same order as that of the oral diuretics.²³

Acetazolamide, or Diamox, is another recently introduced oral diuretic. This interesting compound is an inhibitor of the enzyme carbonic anhydrase, which is found in the cells of the renal tubules. One of the numerous functions of the distal renal tubules is the acidification of urine. This function and the reabsorption of some of the sodium in the tubular urine are intermeshed in an operation which requires carbonic anhydrase for its functioning. In the tubular cell, this enzyme catalyzes the production of carbonic acid from the ever present raw materials, water and carbon dioxide. The carbonic acid, in turn, dissociates to yield hydrogen ion and bicarbonate ion. The hydrogen ion is secreted into the tubular urine in exchange for sodium ion. The operation results in the excretion of acid and the conservation of sodium ion to the body. When Diamox is administered, this enzyme is blocked. The production of carbonic acid decreases and, consequently, the availability of hydrogen ion in the tubular cell is decreased. Exchange of sodium for hydrogen is thereby reduced, allowing more sodium to remain in the tubular fluid. The result is the excretion of increased amounts of sodium and, with it, water. Further, since hydrogen ion secretion is depressed, the urine becomes less acid, and frequently alkaline. A consequence of the use of this compound, therefore, is the production of hyperchloremic acidosis.¹⁷ This is the exact opposite of the electrolyte disturbance produced by mercurials.

In clinical trials,^{18,20} Diamox has been found to be a mild to moderate diuretic. It is said to be more effective in failure due to cor pulmonale than in ordinary types of heart failure.¹⁹ The hyperchloremic acidosis produced is usually mild and asymptomatic; however, it will result in retractoriness to the diuretic action of the drug. In order to allow the body to recover from the acidosis and thus again become responsive to the drug, the compound should not be given more often than once every other day. The side effects of the drug in the doses recommended below are mild, and consist of paresthesia of the circumoral area and the extremities.

Aminometramide, or Mictine, is another useful oral diuretic.²¹ It acts by inhibition of tubular reabsorption of sodium and water, and no electrolyte

disturbance has been reported following its use. Because the side effects are chiefly referable to the gastrointestinal tract, the drug should be given with meals to minimize this. Doses larger than that recommended below will give a high incidence of undesirable reactions; nausea and vomiting were found in 31 per cent of patients receiving 1.5 gm. of Mictine per day.²¹ On the basis of preliminary observations, Rolicton,[®] which is closely related chemically to Mictine, seems to be as effective as, and less likely to cause nausea and vomiting than, Mictine, when 500 mgm. are given three times a day with meals.

Table III summarizes the doses and suggested plan for the use of the oral diuretics discussed.

TABLE III

I. Mictine [®]	200 mg. t.i.d. with meals, every other day
II. Neohydrin [®]	3 to 8 tablets after breakfast, every other day
III. Diamox [®]	250 or 500 mg. every other morning

In general, if possible, all diuretics should be given in the morning, or not later than mid-afternoon, to allow the patients uninterrupted sleep at night. In the case of Mictine, gastrointestinal disturbances dictate administering the drug with meals. With oral mercurials, the larger doses indicated should not be continued indefinitely, since gastrointestinal symptoms of mercurialism are more apt to develop. Furthermore, in patients with elevated blood urea nitrogen or nonprotein nitrogen, there may be an impaired ability to excrete mercury, and mercurial diuretics, oral or parenteral, should not be used in high doses. The importance of bed rest for at least a few hours after administration, to obtain maximal effect, has been stressed above.

Summary

In conclusion, diuretics are important, although secondary, therapeutic measures in the treatment of congestive heart failure. Parenteral organic mercury preparations are the most potent diuretics known. In the absence of severe organic renal disease, mercurials, used with ammonium chloride and aminophylline, as indicated, will produce diuresis in most patients with severe congestive heart failure. The oral diuretics are less effective than injectable mercurials; however, in moderately severe cases, their use may reduce or nullify the requirement for injections. Each of the diuretics must be used with a full understanding of its mode of action and its shortcomings.

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SINTROM, A NEW ORAL ANTICOAGULANT

(Continued from Page 51)

these were compared with those obtained in other patients receiving Dicumarol, Hedulin or Indon (phenylindandione), Dipaxin and Tromexan.

2. On the basis of the mean effective dose, the drug was found to be the most potent of any of those studied.

3. A maintenance dose was difficult to establish which resulted in a high incidence of escape from therapeutic range.

4. Toxicity was not encountered and the incidence of bleeding (17 per cent) was in the general range reported with other anticoagulants.

5. The excessive effect of Sintrom could be rapidly reversed by oral or intravenous Vitamin K₁.

6. A decrease in Factor VII activity paralleled the hypoprothrombinemia produced.

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Interatrial Septal Defect

Course and Surgical Correction

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INTERATRIAL septal defect is an important cardiac anomaly because it usually causes death in early adult life and it is subject to surgical correction. It is one of the most common of the congenital abnormalities of the heart. Gelfman and Levine¹ in studying 453 autopsied cases of congenital heart disease found interatrial septal defect present in 39 per cent of all cases and in 25 per cent of the cases over two years of age. In a clinical study of 1,395 patients with congenital heart disease, Gasul & Fell² found interatrial septal defect to be the fourth commonest lesion, occurring in 9.6 per cent of their series.

The life expectancy in interatrial septal defect varies as it does with other congenital cardiac defects, but average life expectancy is between thirty-four³ and forty⁴ years. Death is preceded by a number of years of increasing cardiac disability. The pathologic physiology is a consequence of the anatomic defect and the associated abnormal hemodynamics. The primary hemodynamic abnormality is an enormous flow of blood from the left atrium to the right. This is referred to as a left to right interatrial shunt. The great quantity of this shunt was demonstrated by Healy, Dow, Sosman and Dexter⁵ who calculated the volume of the flow per minute by obtaining the difference between the pulmonary flow and the peripheral flow in liters per minute. The flow through the shunt in their patients was commonly 6 to 8 liters per minute and not infrequently as high as 25 to 28 liters per minute. This large volume of interatrial flow is added to the normal inflow of the right atrium. Consequently, the minute volume flow through the right atrium, the right ventricle, pulmonary vascular system and the left atrium is very large. The left ventricular and arterial flow is reduced in quantity by the interatrial shunt. The increase in pulmonary flow produces the enlargement of the pulmonary vas-

culature, as seen by x-ray and also produces the vascular pulsation which is occasionally seen, and is known as "hilar dance." The reduced peripheral arterial flow is the cause of the easy fatigue in these patients and the general underdevelopment. It has been shown by Edwards,⁶ Dammann,⁷ and others, that large increases in volume of pulmonary flow eventually produce obliterative vascular changes which increase resistance and consequently elevate the pulmonary artery pressure. Concomitantly there is elevation in right ventricular pressure and increased work for the right ventricle. There follows right ventricular hypertrophy and dilatation and eventual incompetence of both the pulmonary and tricuspid valves. At some stage in this sequence the right atrial pressure rises and clinical signs of peripheral congestive failure ensue. In the late stages, the right auricular pressure may rise to such levels that the volume of the shunt is very much reduced if not completely eliminated and there is occasional reversal of the shunt so that blood flows from the right atrium to the left, with the appearance of cyanosis. Death is the ultimate consequence of this pathophysiologic progression.

The anatomic consequence of the interatrial shunt is enlargement of the pulmonary artery and its radicals, enlargement of the right ventricle, the right auricle and left auricle. Apparently, as the atria dilate, the defect in the interatrial septum also enlarges, that is, it is stretched along with the atrial walls and septum. This increases the amount of the shunt. The mitral valve has been commonly found to be abnormally small, but not the seat of pathologic abnormality. The probable reason for this is that since the flow through the mitral valve into the left ventricle has always been small, the valve has not enlarged at the normal rate. As the individual grows, there is greater disproportion between the mitral valve which remains relatively infantile and the interatrial defect which enlarges as the atria dilate. The effect of this is an increasing per cent of left to right shunt.

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As a means of correction of this anomaly, closure of the interatrial septal defect is obviously necessary. Open heart surgery with inflow occlusion may occasionally be necessary, but for the

inflow and should not of course interfere with the AV conduction system, or the outflow of the coronary sinus. Before the closure it is possible to pass the intracardiac finger through the auricu-

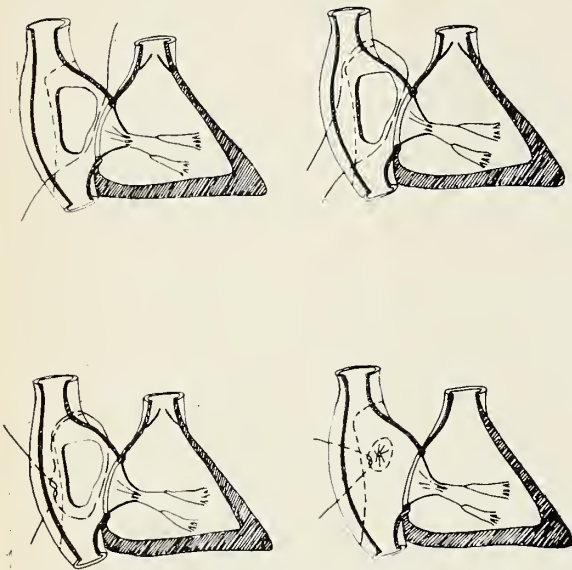


Fig. 1. Interatrial defects; closed methods of repair. The four drawings illustrate the placement of the circumferential suture and the dissection behind the vena cava into the posterior portion of the interatrial septum, which permits closure of the defect by tying the suture.

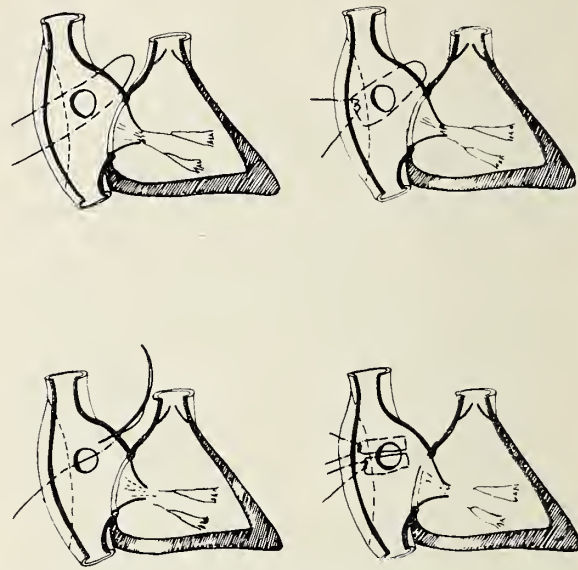


Fig. 2. Interatrial defects; closed methods of repair. Drawings A and B illustrate placement of mattress sutures from the Sondergaard dissection to close the defect. Drawings C and D illustrate the technique of Lam for closing the defect with the double ended needle.

commoner atrial defects the closed method has proven very safe and effective. The closed method of interatrial repair depends upon a technique developed by Sondergaard, presented by Bjork and Craford.⁸ Briefly, the method of Sondergaard depends upon the fact that the posterior portion of the interatrial septum reaches the atrial wall at a point between the vena cava and the right pulmonary veins. Thus, by dissecting up the vena cava away from the pulmonary veins at the hilum of the lung, the dissection is carried essentially into the back portion of the interatrial septum. Once this dissection has been made, sutures can be placed from the outside of the atrium, which can close the septal defect. The needle is guided by the finger introduced into the right atrium through the auricular appendage. Through the septal defect both sides of the interatrial septum can be palpated as the sutures are being placed. These sutures can be placed in a variety of ways and the completeness of the closure can be clearly appreciated by the palpating finger. The closure can be accomplished without interference with the vena caval

lar defect and palpate the mitral valve and to palpate any possible tricuspid insufficiency. As the defect is closed the distention of the right atrium becomes noticeably less, and the color of the blood as the finger is withdrawn from the right atrial appendage is dark venous in appearance rather than bright red as when the finger was introduced. We have also noted, in cases where a pulmonary arterial thrill had been palpable, that this has disappeared upon interatrial closure. Suturing and manipulation from the right side of the heart is attended with very little rhythm irregularity and the cardiac function has been well maintained during surgery. Figures 1 and 2 illustrate three methods of suture placement. All start from the Sondergaard dissection. The lower two illustrations in Figure 2 show the method of suture placement devised by Lam⁹ which uses a double-ended needle. In cases where the septal wall is thick enough, this method has been very useful.

The indication for surgical closure of an interatrial septal defect would appear to be the presence of the defect in any patient who has

not progressed to the stage of such elevated irreversible pulmonary hypertension that operation can produce little or no improvement. Ideally the closure should be effected before the secondary anatomic results of the massive shunt and chamber enlargement have occurred. There is no doubt that the operative procedure is easier and less hazardous when undertaken on the small hearts of children rather than upon the tremendously enlarged hearts of adults. Our present feeling is that parents with children who have interatrial septal defects should be advised to have operative closure for the following reasons:

1. The expectation is that the individual will die before the age of forty without closure.

2. Early operation prevents:

- (a) Progressive enlargement of the interatrial defect.
- (b) Increasing disproportion of the mitral valve and the defect.
- (c) Progressive pulmonary vascular changes and pulmonary hypertension.
- (d) The clinical complications of the disease such as recurrent pneumonia, pulmonary thrombosis, and hemoptysis.

3. The child can regain his normal growth curve.

4. The operation is technically easier and less hazardous in childhood.

Surgery is contraindicated if the pulmonary pressure, as measured by catheterization, is considerably elevated. The reason for this is that irreversible pulmonary vascular changes have occurred and the right heart symptoms will not abate as a result of closure of the defect. Pulmonary hypertension is clinically suggested by signs of right cardiac failure, a very large heart and if the patient is over forty years of age.

Case Reports

The following three cases are presented to illustrate the previous points.

Case 1.—This was a forty-two-year-old woman who had had progressive disability for six years, characterized by breathlessness, fatigue, dependent edema and ascites. She entered the hospital completely incapacitated and was maintained in an oxygen tent. Roentgenogram showed tremendous enlargement of the heart (Fig. 3). Angiography demonstrated trichamber enlargement with a very large pulmonary arterial tree. Catheterization findings by Dr. Harper Hellemis showed that there was a left-right shunt of 4.7 liters per minute and that the pulmonary artery pressure was 97/36. Operation was carried out April 19, 1955. At this time a

tremendous right auricle was demonstrated. The defect by palpation was felt to be 4 to 5 cm. in diameter. There was definite tricuspid regurgitation. The defect was completely closed with mattress sutures.

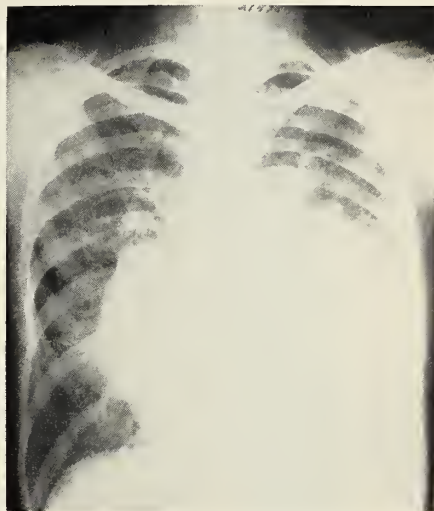


Fig. 3. Case 1. Preoperative chest radiograph.

Following operation the patient was improved. Her respiration was considerably easier. She could be out of her oxygen tent, was up and around, and the edema of the extremities cleared somewhat. She was discharged on the twentieth postoperative day. At home, the signs of right-sided failure gradually increased, and the pulmonary symptoms did not reappear. The patient died suddenly at home four months following operation.

Comment: This was an advanced phase of interauricular septal defect with high pulmonary pressure. The operation was undertaken because of the high volume of the shunt and the precarious condition of the patient. In the presence of tricuspid insufficiency, closure of the shunt did not correct the right-sided failure and operation was too late to be of benefit to this patient.

Case 2.—This patient is a thirty-six-year-old mother of five children, who had had progressive symptoms for four years, consisting of easy fatigue, dyspnea, tachycardia and hemoptysis. On examination, she had signs of atrial septal defect, and catheterization by Dr. Harper Hellemis proved the presence of the defect. There was a left to right shunt of 9.1 liters per minute, but the pulmonary artery pressure was 27/11, indicating not more than minimal pulmonary vascular obstructive changes. Operation was carried out June 14, 1955. The interatrial defect was found to be 2.4 cm. in size. The mitral valve opening was about a finger and a quarter in size. The interatrial septal defect was closed with three mattress sutures. The patient did well following operation. She was discharged on the tenth

postoperative day. The x-ray taken two months postoperatively is reproduced with the preoperative film (Fig. 4). The transverse diameter had decreased 1.8 cm. Following operation the patient has had occasional

Case 3.—This is a five-year-old girl who had rather slow physical development and frequent colds. She was found to have an enlarged heart with a systolic murmur. Catheterization was carried out January 17,

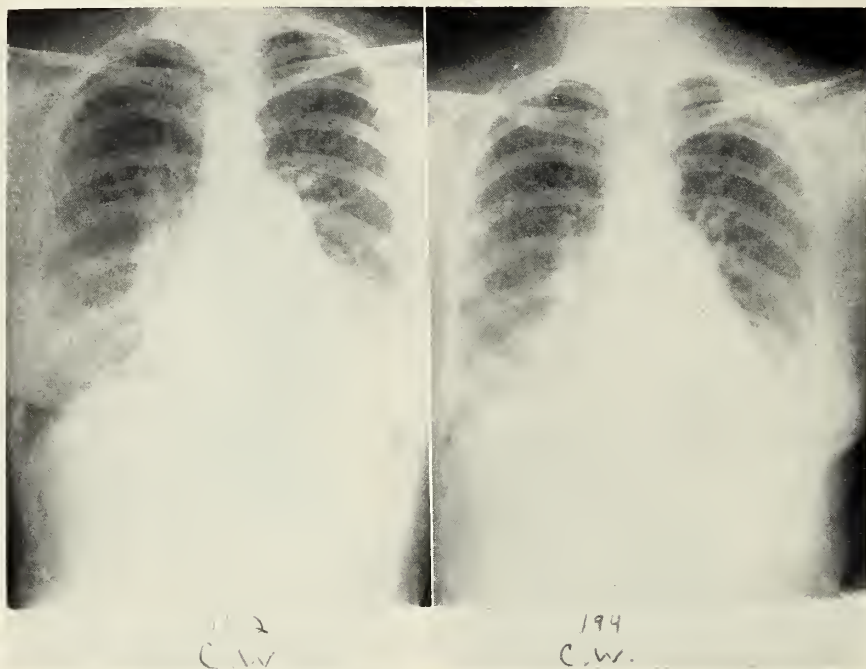


Fig. 4. Case 2. Preoperative (lt) and postoperative (rt) chest radiographs.

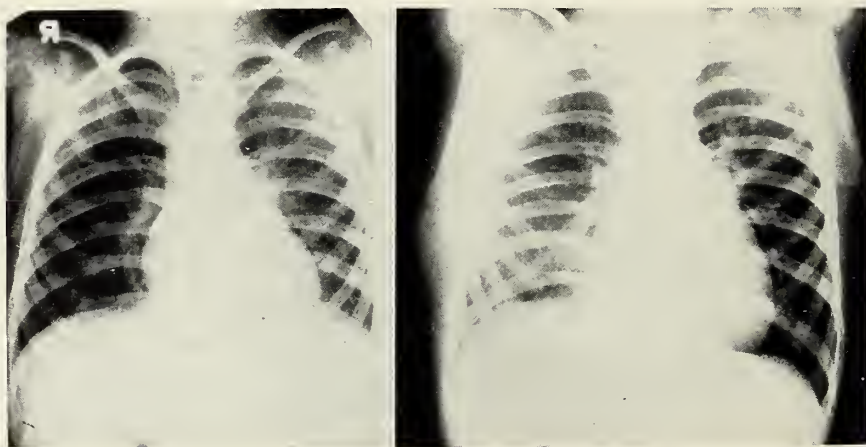


Fig. 5. Case 3. Chest radiographs. Six days postoperative (lt) and two months postoperative (rt) when heart size was normal.

tachycardia but no pulmonary difficulty, no fatigue, and felt considerably improved. Two months following operation the patient became pregnant and was delivered of an eight pound, six ounce, child in breech presentation. There were no signs of failure during the pregnancy or during or following delivery. At present the patient is caring for her six children and feels well.

Comment: This is an example of an adult in whom closure of the defect has been corrective, since there had not been significant increase in pulmonary pressure.

1955, by Dr. Anthony Nolke; angiocardiography was done February 23, 1955, by Dr. John Hertzler. These tests were consistent with interatrial septal defect. Operation on January 9, 1956, demonstrated a defect of $1\frac{1}{2}$ cm. in diameter, well above the tricuspid valve, which was closed without difficulty with through-and-through mattress sutures. The murmurs disappeared. She was discharged home on the ninth postoperative day. The two-months' follow-up roentgenogram appears with one taken shortly after operation (Fig. 5). It shows the change in size and contour of the heart to

(Continued on Page 90)

Familial Heights as a Useful Guide in the Diagnosis of Genitourinary Anomalies

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HAVING observed certain congenital urinary anomalies in association with familial height, it was deemed worth while to report these observations. Many years ago I called attention to the selective action of the endocrine glands on various tissues depending upon their embryologic origin.¹

In the present article, a brief résumé will be given showing the relationship of the pituitary gland to the genitourinary tract and the relation of the familial height to anomalies of this tract. A potent argument favoring the view that the pituitary affects mesodermal tissues (of which the genitourinary tissues are a part) is seen in the anencephalic fetus with pituitary defects.¹ The pituitary maldevelopment in these fetuses produces an aplasia of the genitourinary tract with small kidneys, defects in the genitalia and adrenal cortex hypoplasia.

It has been shown that pituitary defects result in genitourinary defects as well as mesodermal defects in general. It is also true that pituitary hyperfunction results in hyperplasia of the genitourinary system as well as hyperplasia of the adrenal cortex. The adrenal cortex, a mesodermal derivative, has a selective action on a division of the mesoderm, namely the mesothelium. From this are derived the following tissues:

1. Peritoneum.
2. Pleura.
3. Pericardium.
4. Urogenitals: (a) Wolffian body; (b) Kidney; (c) ovary; (d) oviducts, uterus, and vagina.
5. Striated muscles: (a) Skeletal; (b) cardiac muscle.

The important feature to be discussed is the pituitary, the controlling gland of the mesoderm and the mesodermal subdivision, the mesothelium.

In discussing the relationship between the pi-

uitary and adrenal cortex I said that anterior cerebral defects which include pituitary defects are in turn accompanied by adrenal cortex defects.¹ In 1943, discussing renal rickets, I stated that a congenitally deformed pituitary gland is frequently associated with congenital cerebral defects such as anencephalus and hydrocephalus. Such a pituitary defect is associated with a secondary genitourinary tract defect in the form of kidney malformation, dilatation of the kidney pelves and the bladder. Agenesis of the adrenal cortex is also usually present. A further association of the pituitary to the genitourinary tract and skeletal system is seen in renal rickets or renal dwarfism. In this disease, diabetes insipidus is frequently present, indicating a posterior lobe defect since these cases respond to vasopressin and are not the result of the renal defect such as is present in nephrogenic diabetes insipidus. This presumes that the anterior pituitary lobe, while defective in development, is not completely so; otherwise, there would be no diabetes insipidus. The same holds true for the kidney, that is some functioning renal tissue must be present albeit the kidneys are small and aplastic.

Chown,² in commenting in his studies of renal dwarfism, came to the conclusion that the disease is the result of a pituitary-diencephalon disturbance. He said "The argument in proof of the thesis that a lesion of the pituitary-diencephalic mechanism is the primary cause of the symptom complex called renal rickets is then as follows:

1. Malformation of the pituitary has been found in these cases;
2. The associated symptoms of the dwarfing infantilism and urinary tract dilatation can be caused by such a lesion;
3. The nephritis is not primary but is secondary to an abnormal metabolism, itself the result of faulty bone growth;
4. The faulty bone growth therefore not being due to the nephritis, and the remaining symptoms being due to pituitary-diencephalic disease. It is to be presumed that the bone disease is due to the same cause."

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In reviewing some of the literature on renal rickets, I was impressed with the fact that developmental defects of the kidneys, urinary tract and skeleton are important features of the disease associated with defects in the pituitary-hypothalamic region. For instance, hydrocephalus may be associated with a pituitary defect and this in turn with an anomalous development and aplasia of the adrenal cortex, urinary and genital organs.³

Davis,⁴ in his study of kidneys and ureters found coexisting abnormalities of the genital organs. He reported cases of urinary bladder dilatation and kidney anomalies associated with hydrocephalus. Increased intracranial pressure from whatever cause during the early developmental period of life results in pituitary disturbance with consequent genitourinary anomalies and defects. Congenital hypopituitarism of various degrees, even to the extent of complete apituitarism, results in aplasia of the adrenal cortex and the genitourinary tract.

A congenitally small pituitary or underactive deformed pituitary is, therefore, most likely to be associated with maldevelopment of the kidneys and genitalia, such as aplastic malformations which usually include the adrenal cortex.

By the same reasoning and based on clinical evidence, hyperfunction of the pituitary is most likely to be associated with overdevelopment of the kidneys, genitalia and adrenal cortex. This is well illustrated in acromegaly and gigantism. In these diseases the growth hormone affects the whole body structure, increasing the size of the viscera and, of course, this includes the kidneys. It is known that anterior pituitary extracts can increase the size of the kidneys.⁵

If the pituitary activity is reflected in the genitourinary tract, then familial heights may give a clue to urinary pathology. As we know, the pituitary is a most important factor in the development of the skeletal system so that heights of the immediate family may guide one in suspecting what type of genitourinary pathology may be present. This may be briefly summarized by stating that familial shortness of stature is associated with congenital underdevelopment of the kidneys such as is present in renal dwarfism, and that familial tallness is associated with overdevelopment of the kidneys such as supernumerary multiple kidneys, and multiple ureters. Likewise, polycystic kidneys are associated with familial tallness.

The constitutional hereditary background is shown by the familial heights of greater than average sampling of the population. In the First World War the average height of the male recruits was 67 inches and in the Second World War it was 68 inches. In the immediate family it is usually found that the male members are 72 inches or more in height. This could be interpreted as indicating a constitutional familial background of skeletal overactivity as compared with the normal skeletal activity. This, then could indicate a pituitary hereditary factor as responsible for the kidney anomalies, if one grants that the pituitary is necessary for genitourinary development. Applying this same principle to the underdeveloped anomalous defects of the genitourinary tract, it is found that this occurs in the shorter than normal male members of the immediate family. It is of some interest and importance that individuals with a high arched palate usually have pituitary disturbances. This holds for both hypofunction and hyperfunction of the gland. Elsewhere¹ it was stated that, since the anterior lobe of the pituitary develops from the roof of the mouth, the high arched palate indicates a congenital pituitary background that is a predisposition to a disturbance of this gland. It is seen in individuals with migraine, epilepsy, retinitis pigmentosa, arachnodactyly, and in many individuals with an allergic condition, the latter probably being due to a pituitary-hypothalamic disturbance. Individuals with genitourinary defects have, as a rule, a high arched palate.

It should be stated that the short asthenic built individual is the one who suffers from underdevelopment of the genitourinary tract. However, *short, stocky individuals* who have characteristics of pituitary basophilism are apt to have double ureters, reduplication of pelves and horseshoe kidneys, the same as the individual with a tall background. This is due probably to the overactivity of the pituitary before puberty resulting in rapid ossification and shortness of stature. They are the pyknic type of individual. As an example of familial height giving a clue to genitourinary pathology is a family of two boys and a girl, each of whom had two kidneys and two ureters on the left side and a normal kidney and ureter on the right.

The genetic constitutional inheritance factor is shown by the familial heights. Both the father's and mother's height was 72 inches, the two boys

were 72 inches and 74 inches respectively, and the girl 71 inches.

The familial height has been very useful in directing and anticipating genitourinary diagnoses so that attention is directed to this feature as a diagnostic aid.

Summary

Based on clinical and embryologic observations it was found that the state of the pituitary gland is related to the development of the genitourinary tract. Congenital defects of the pituitary gland are associated with congenital genitourinary defects as well as aplasia of the adrenal cortex.

Overactive pituitary function of a congenital nature is associated with overdevelopment of the genitourinary tract and adrenal cortex hyperplasia. Because of the relationship of the pituitary glands to both the osseous system and the genitourinary tract, it has been found over a period of many years that the familial heights are a useful guide to genitourinary anomalies.

The pituitary's selective action on mesodermal tissues (the osseous system, genitourinary tract and adrenal cortex are mesodermal in origin) furnishes an understanding of these mesodermal anomalies.

In a general way, it can be said that familial shortness of stature associated with an asthenic habitus is accompanied by developmental defects of the genitourinary tract, such as renal rickets, aplasia and hypoplasia of the kidneys. However, familial shortness of stature in asthenic built individuals with suggestive pituitary basophilism symptoms results in overgrowth of the genitourinary tract, since the overactive pituitary in these individuals produces early and rapid ossification with shortness of stature. They are therefore, comparable to the tall individual in respect to genitourinary anomalies.

Attention was called to the fact that individuals with a high arched palate usually have pituitary disturbances.

This is true for both hypofunction and hyperfunction. The reason for this high arched palate is believed to be due to the fact that the anterior pituitary lobe develops from the roof of mouth. Individuals with genitourinary defects, have, as a rule, high arched palates.

Conclusion

Familial heights are a useful guide in diagnosing congenital genitourinary anomalies.

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TUBERCULOSIS PROBLEM NOT SOLVED

Despite a gratifying decline in the death rate, the tuberculosis problem in this country will not approach acceptable solution until the morbidity rate demonstrates a corresponding decline. Over the last five years, deaths from tuberculosis have declined between 15 and 20 per cent each year. The morbidity rate, however,

has declined only three to four per cent per year over the same period of time. At this rate, more than a quarter century will be required to equal the same per cent reduction in morbidity that has been achieved in mortality in the past five years alone.—*Annual Report, Special Health Services, U. S. Department of Health, Education, and Welfare, Washington, D. C. (1954-1955)*

Paroxysmal Tachycardia in Infants

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EARLIER writers have pointed out that the counting of pulse rates in infants is a much neglected procedure. When the counting is done routinely, the incidence of cardiac arrhythmias is found to be higher than the medical literature would indicate. Of the arrhythmias, the one most frequently occurring is paroxysmal tachycardia. Since this type of arrhythmia often terminates fatally, failure to recognize the excessive heart rate is unfortunate inasmuch as the prognosis with treatment is excellent.

Because of the general unfamiliarity with this disease, we are presenting four cases and are taking this opportunity to review this syndrome.

Case Presentation

Case 1.—A thirteen-month-old, white male infant was admitted to Harper Hospital, July 6, 1955, with the diagnosis of an acute upper respiratory infection. The baby had been well until three hours prior to admission. At that time, the mother had noticed labored breathing, increased irritability and a short interval of cyanosis. On physical examination, the infant appeared acutely ill and in marked respiratory distress. He seemed very toxic with a fixed apprehensive stare. His temperature was 102.6° F. by rectum. His respiratory rate was 40 per minute, regular and with symmetrical excursion of the chest. Occasional rales were heard in both bases. The pulse rate was counted at 200 per minute. The liver and spleen were not enlarged. No cyanosis or signs of heart failure were apparent. The balance of the examination was noncontributory. An electrocardiogram taken on admission showed a tachycardia of 180 per minute of supraventricular origin. No other cardiac abnormalities were found. The white blood cell count showed no significant alteration in number or in cell components. Urinalysis, throat and blood culture and a chest roentgenogram showed no abnormalities.

The infant was placed in an oxygen tent. 300,000 units of procaine penicillin were administered intramuscularly. Digitoxin was administered orally on the basis of 0.05 mg. per kg. body weight and given in three doses at eight-hour intervals. The first dose contained one-half the calculated digitalizing dose. The second and third doses each contained one quarter of the calculated dose. One-tenth of the calculated dose per day was given for maintenance. Within twenty-four

hours, the pulse rate was 110 per minute. The symptoms of dyspnea, toxicity, and elevated temperature all subsided correspondingly. The digitoxin was discontinued on the third hospital day. Subsequent examinations showed no evidence of underlying heart disease. A second electrocardiogram taken on the fifth hospital day was normal. The patient was discharged on the seventh hospital day. No recurrence of this disease has been noted to the present time.

Case 2.—A three-and-one-half-month-old, white male infant was admitted to Harper Hospital, July 26, 1955, with a history of intermittent cyanosis, vomiting, and a temperature of 104° F by rectum for two days. On physical examination, the infant appeared acutely ill, cyanotic, and extremely toxic. His pharynx was moderately injected. His respiratory rate was 48 per minute, regular, and with symmetrical excursion of the chest. No rales or pulmonary abnormalities were found. His pulse was counted at 200 per minute. His liver and spleen were not enlarged. No evidence of heart failure was noted. The balance of the examination was noncontributory. An electrocardiogram taken on admission showed a tachycardia of 200 per minute of supraventricular origin. No other cardiac abnormalities were found. The white blood cell count showed no significant alteration in number or cell components. Urinalysis, throat and blood culture, and a chest roentgenogram showed no abnormalities.

The infant was placed in an oxygen tent. 150,000 units of procaine penicillin were administered intramuscularly. Digitoxin was administered intramuscularly on the basis of 0.05 mg. per kg. body weight. The same schedule of administration and dosage was used as in the first case. Within twenty-four hours the pulse rate dropped to a normal value, and the other symptoms correspondingly cleared. The digitoxin was discontinued on the third hospital day. Subsequent examinations showed no evidence of underlying heart disease. The patient was discharged on the fourth hospital day. No recurrence of this disease has been noted up to the present time.

Case 3.—A three-month-old, white male infant was admitted to Harper Hospital, August 23, 1955, with a history of the abrupt onset of dyspnea, listlessness, pallor, and sweating six hours prior to admission. On physical examination, the infant appeared acutely ill, extremely toxic and frighteningly near death. His temperature was 103° F by rectum. His respiratory rate was 36 per minute, regular and with symmetrical excursion of the chest. His breath sounds were harsh and bronchial in nature. His pulse was counted at 190-200

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per minute. His liver and spleen were not enlarged. Neither cyanosis nor signs of heart failure were noted. The balance of the examination was noncontributory. An electrocardiogram taken on admission showed a tachycardia of 190 per minute of supraventricular origin. No other cardiac abnormalities were found. The white blood cell count showed no significant alteration in number or cell components. Urinalysis, throat and blood culture, and a chest roentgenogram showed no abnormalities.

The infant was placed in an oxygen tent. 150,000 units of procaine penicillin were administered intramuscularly. Digitoxin was administered intramuscularly in the same dosage formula and schedule as with the previous cases. Within twenty-four hours, the pulse rate dropped to a normal value and the other symptoms correspondingly cleared. The digitoxin was discontinued on the third hospital day. Subsequent examinations showed no evidence of underlying heart disease. The patient was discharged on the fourth hospital day. No recurrence of this disease has been noted to the present time.

Case 4.—A two-week-old, white male infant was seen at another hospital three hours following the repair of a unilateral harelip. He had been given 1/800 gr. of scopolamine preoperatively. For anesthesia, he had been given ether by open-drop. On physical examination, the infant appeared acutely ill and extremely toxic with marked dyspnea and sweating. His temperature was 104.2°F by rectum. His respiratory rate was 42 per minute, regular and with symmetrical excursion of the chest. No rales or pulmonary abnormalities were found. His pulse was counted at 200 per minute. His liver and spleen were not enlarged. No evidence of heart failure was noted. The balance of the examination was noncontributory. An electrocardiogram taken immediately showed a tachycardia of 200 per minute of supraventricular origin. No other cardiac abnormalities were found. The white blood cell count showed no abnormalities.

The infant was placed in an oxygen tent. 150,000 units of procaine penicillin were administered intramuscularly. Digitoxin was administered intramuscularly in the same dosage formula and schedule as with the previous cases. The pulse rate dropped to a normal value on the fourth hospital day and the other symptoms correspondingly cleared. The digitoxin was discontinued on the fifth hospital day. Subsequent examinations showed no evidence of underlying heart disease. No recurrence of this disease has been noted up to the present time.

Discussion

In 1941, Hubbard¹ reported nine cases of paroxysmal tachycardia in infants under the age of one year. He stressed the acute onset of the attack, the alarming clinical picture, and the frequency of fatal termination. In his discussion, he pointed out that many cases of a malignant syndrome of unknown etiology in infants reported

in the literature at that time were similar to his cases but that the heart rate had not been counted. On this basis, he felt that the syndrome was much more prevalent than generally reported, probably being overlooked in many cases. In 1952, Nadas and co-workers² presented a comprehensive article on this subject with a detailed analysis of forty-one cases in infants and children. They were able to form a concise picture of this syndrome which will be presented in outline form and augmented with our own experience.

Age.—Almost all of the cases occurred in infants four months of age or younger. Three of our cases were four months of age. One patient was thirteen months of age.

Sex Incidence.—All four of our cases occurred in males. This observation is in agreement with other studies indicating that the male is the most frequently affected.

Etiology.—No apparent single causative factor precipitated the attacks. Many infants seemed well prior to the illness. A few had respiratory infections which had been considered trivial. One of our cases had sustained his attack following the use of scopolamine in preanesthesia medication. In Nadas' series, two cases followed anesthesia, and one had atropine sulfate as preanesthesia medication. Although congenital heart disease and the Wolff-Parkinson-White syndrome can be the cause of paroxysmal tachycardia, neither is etiologically important in this age group.

Clinical Appearance.—The onset was usually sudden. The infants appeared acutely and critically ill. They were prostrate with a fixed apprehensive stare and ashen color. Respiration was rapid and labored. The clinical impression was that of an acute septic disease. Many had an elevation of temperature. The urine was usually normal; the white blood cell count sometimes showed an elevation. The roentgenogram of the chest was normal unless there was congestive heart failure. In advanced cases, there was evidence of heart failure with cyanosis, enlargement of the heart and liver, pulmonary congestion, abdominal distension and frequent vomiting. The roentgenogram of the chest may then have shown the heart to be enlarged with both ventricles equally involved and congestive changes present in the lung.

In all cases, the excessive heart rate was outstanding. The rate varied in the individual case. None of the cases had a rate less than 180 per minute, and some had a rate as high as 330 per minute. A heart rate of 180 per minute or higher in an infant should always bring this syndrome to mind.

The appearance of heart failure is dependent on the duration of the attack, not on the rate of the tachycardia. In Nadas' study, none of the infants showed evidence of heart failure when the attack was less than twenty-four hours' duration. After forty-eight hours, one-half of the untreated cases showed signs of failure. In Hubbard's observation, when the syndrome was less clear and treatment not instituted promptly, the infants either died in heart failure or recovered completely, the attack subsiding spontaneously.

Electrocardiogram.—The only significant finding was the tachycardia of supraventricular origin. If other changes should be present, other diseases must be considered. In the Wolff-Parkinson-White syndrome, the characteristic findings are not present during the attack of paroxysmal tachycardia but are revealed only in the electrocardiogram taken between attacks.³ Repeating the electrocardiogram in these infants when the rate becomes normal is important.

Treatment.—Many methods and drugs can be used for stopping a rapid heart rate. In this syndrome, digitalis has been the most successful and the least dangerous of all therapies. Both Nadas and Hubbard emphasize that the dosage in infants must be higher on a weight basis than

ordinarily used in older children and adults. The recommended dose in children under two years of age is 0.03 to 0.05 mg. per kg. body weight with complete digitalization in twelve to twenty-four hours. Not all observers are in agreement with the larger dose.⁴ The daily maintenance dose is one-tenth of the total digitalizing dose. The infants are maintained on digitalis two to seven days or longer following the return of the normal heart rate. In small infants, digitoxin intramuscularly is the treatment of choice.

Supportative treatment should also be given. The infants should be placed in oxygen and given antibiotics, if they are indicated.

Summary

Paroxysmal tachycardia in infants is presented as a distinct clinical entity. Counting the pulse rate is a necessary part of an infant's examination.

Acknowledgment

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IMMUNIZATION

Diphtheria.—The outbreak of diphtheria in Detroit in December suggests some needed statewide remedy. It is not listed as an epidemic but 161 cases have occurred in six special districts, mostly poor and underprivileged. The rate of immunization of school children is below 40 per cent. Only six cases have developed in all other areas where the rate of immunization is mostly around 60 per cent. All doctors treating such children or having influence in neglected districts should urge and administer toxoid protection. Six deaths have been attributed

to a disease rarely seen because of well-known control methods.

Polio.—This is the recommended season for polio vaccine shots. The vaccine is accumulating rapidly and is being left standing on warehouse shelves. Too many children are still unprotected. The Health Department and the Council of the Michigan State Medical Society are urging that everyone through the early thirties be immunized without delay, and most especially the youth years. It takes about seven months for maximum protection. Now is not too late.

Modern Techniques for the Diagnosis of Pheochromocytoma

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THE PATIENT with pheochromocytoma presents a potentially curable lesion. In the past ten years considerable advances have been made in the precise diagnosis of this condition. It is the purpose of this article to review these advances for the benefit of the practicing physician.

When To Suspect Pheochromocytoma

All patients with essential hypertension should be viewed as suspects. Cases have been found among both the sustained and labile types. The index of suspicion is generally increased when the patient with hypertension also shows transient glycosuria or hyperglycemia, or when episodes of spontaneous sympathetic and vasomotor activity occur with palpitation, tachycardia, flushing, increased perspiration or tremors. It is important to recall that the disease may also occur among apparent normotensives who show blood pressure elevations only with attacks. These attacks may vary in their symptomatology but usually include palpitation, flushing, headache, perspiration, tremulousness, and abdominal pain. Presence of dizziness, numbness and paresthesia of the fingers and about the mouth denote hyperventilation syndrome and are not characteristically caused by pheochromocytoma; relation to meals and relief by ingestion of carbohydrate may denote hypoglycemic episodes.

Diagnostic Procedures If Systolic Blood Pressure Exceeds 200

1. *Regitine Test*.—The best screening test when the blood pressure is substantially elevated (i.e. exceeds 200/110) consists in the slow intravenous injection of 5 mg. Regitine®. Intramuscular injection may lead to a false negative.¹

(a) *Procedure*.—The patient is placed in the resting recumbent state and the blood pressure is taken every 30 seconds. When the readings have

stabilized, a venipuncture is done but the drug is not injected until the blood pressure in the opposite arm returns to the previous basal level. The drug is then given slowly over a 45-second interval, blood pressure and pulse rate being taken every thirty seconds in the opposite arm for a period of five minutes.

(b) *Interpretation*.—A reduction of 25 mm. in the diastolic blood pressure in at least two successive readings is considered a positive response.

(c) *False positives*.—False positives occur in patients under the influence of various antihypertensive drugs. They are reported in uremia, but since this rarely coexists with pheochromocytoma, it is not usually necessary to test hypertensive patients with consistently elevated nonprotein nitrogen in the blood. In the absence of any of these explanations, about 10 per cent of the cases show false positive reactions due, no doubt, to the fact that Regitine, in addition to its adrenergic properties, has weak ganglionic blocking and direct vasodilator activity. Therefore, a *positive Regitine test should be viewed as a screening test only*. It should be repeated and should be checked with benzodioxane or histamine test.

(d) *False negatives*.—These are rare. It should be noted that if the blood pressure is not greatly elevated, the Regitine test cannot be positive by definition without inducing considerable hypotension, since a diastolic blood pressure fall of 25 mm. is necessary to qualify as positive.

(e) *Contraindications*.—These are relative but would include chiefly patients with a history suggestive of cardiac arrhythmias or angina pectoris. The drug has excitatory properties. Tachycardia is regularly induced and in at least one instance angina pectoris has followed testing. It is believed that this latter effect is transitory, mild and can be overcome by vasodilators, and that if the test is really indicated, no harm can come of the procedure if proper precautions are taken.

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Development of the analytic procedure for catecholamines was greatly aided by a grant from the Michigan Heart Association.

2. *Benzodioxane Test*.—This procedure is indicated when the Regitine test has been positive and the blood pressure is substantially elevated. Details of the test procedure, as printed by the manufacturer, have been modified in our clinic as follows:

(a) *Procedure*.—The calculated amount of the drug is taken up in the syringe and after the basal blood pressure has been determined in the opposite arm, a venipuncture is performed and the blood pressure allowed to return to the basal level. The drug is then injected slowly at a steady rate such that one-half the dose has been administered in the first minute. The blood pressures taken every 30 seconds on the opposite arm are then inspected. If a rise of less than 15 to 30 mm. Hg. systolic or diastolic has occurred, the remainder of the dose is given in the second minute. If such a rise has already occurred, the injection is stopped, since in all likelihood the test will be negative and further injection may only cause distressing side effects (tachycardia and dyspnea) and a further elevation of the blood pressure. Since the blood pressure may arise falsely due to anxiety, it is important that the patient be reassured prior to the injection and that if possible he should not know the moment the injection is started. The more elaborate testing technique of Goldenberg and Aranow² was devised for this reason.

(b) *Interpretation*.—According to the originators of the test, a positive reaction can be judged only when it is performed according to their precise technique. In our experience, any reduction exceeding 5 to 10 mm. Hg. of systolic and diastolic pressure by our technique should be viewed as a positive reaction.

(c) *False negative reactions*.—False negative reactions occur with greater frequency than with the Regitine test, probably because the drug has a concomitant central excitatory and hypertensive effect, combined with a weaker adrenolytic and no vasodilator activity.

(d) *False positive reactions*.—These are said to occur in uremia.

(e) *Contraindications*.—The drug should be given carefully in extremely hypertensive patients but the procedure outlined above should protect from serious reactions. The central and cardio-excitatory effects on the heart rate might be ad-

verse in angina pectoris, but we have had no such personal experiences.

3. *Urinary Catechol Amine Analysis*.—Approximately 3 per cent of intravenously administered adrenaline or noradrenaline can be recovered in the urine by sensitive bioassay techniques. This recovery is further reduced if the urine is neutral or alkaline and subject to oxidation. There is a wide variation in "normal" 24-hour urine catechol amine excretion, the limits being approximately 10 to 100 micrograms per twenty-four hours.³

(a) *Procedures*.—During the collection period it is important that each urine specimen be immediately acidified to prevent oxidation of catechol amines. Fluorescent contaminants present in most stoppers must be excluded by covering with cellophane. After the specimen is collected, an approximate 100 cc. aliquot may be taken for chemical or biologic assay.*

(b) *Chemical method*.—The urine is passed through an alumina column which adsorbs 90 to 100 percent of catechol amines. It is then eluted with acetic acid and oxidized by the addition of potassium ferricyanide at pH 6.5 to adrenochrome. Ascorbic acid is then added to stop further oxidation and the adrenochrome is rearranged to the highly fluorescent adrenolutin by the simultaneous addition of NaOH. The mixture is read in the Farrand photofluorimeter and compared with a similar urine sample which, by omitting the ascorbic acid oxidation, has been permitted to go to complete destruction of the catechol ring structure. Although the norepinephrine derivative possesses only one-fourth of the fluorescent activity of epinephrine, the two cannot be separated by this test. For consistency, the result is expressed as micrograms of epinephrine. This is essentially the method of Von Euler et al⁴ and can be performed using any sensitive photofluorimeter. Both adrenaline and noradrenaline added to urine are measured accurately by this procedure. Other related substances may also contribute to fluorescence. The procedure is not quite the same as that used by Goldenberg, but on the basis of considerable experience we believe that a satisfactory distinction between normal, hypertensive, and pheochromocytoma cases can be made.

*The sample can be sent in a special mailing carton provided on request from the Hypertension Unit, University of Michigan Hospital, Ann Arbor, Michigan. The cost of the test is \$15.00.

TABLE I. RESULTS OF TESTS IN PROVEN CASES OF PHEOCHROMOCYTOMA
University Hospital 1956

Cases	Histamine Test	Regitine Test	Benzo-dioxane	24 Hour Catechol Amines* Mcg/24 hr.	
				Pre-Operative	Post-Operative
W. H.	..	+	+	645 512	46
R. J.	..	+	+	665 502	
R. B.	..	+	+	243** 144 118	

*Of 37 normal persons and pheochromocytoma suspects, the mean twenty-four hour excretion of catechol amines, expressed in terms of epinephrine equivalent, was 49.2 micrograms with a range of 9.4 to 107.5. One false positive of 486 is recorded, but subsequent preoperative values were 87 and 44 mcg/24 hours. A bilateral adrenal exploration was negative.

**This patient had a small area of adrenal medullary hyperplasia at operation, but when the adrenal was clamped the blood pressure fell markedly. The findings did not resemble the usual pheochromocytoma pathologically and her status remains in some doubt.

(c) *Biological method.*—This is a complex procedure, depending on the contraction of a spirally cut strip from rabbit or rat aorta when solutions containing .01 to .0001 micrograms of adrenaline are compared to the response of the unknown sample eluted from the alumina column. The method used in our laboratory is patterned after the technique of Helmer with certain local modifications. The test is used when the urine sample by the chemical method shows a high output of catechol amines.

(d) *Interpretation.*—It is evident from the above that unknown contaminants may produce either fluorescent or vasoactive compounds which resemble adrenaline or noradrenaline. No drugs capable of producing fluorescent end products should be given during the urine collection. Furthermore, adrenaline and noradrenaline cannot readily be distinguished by these methods but since both are found in varying amounts in cases of pheochromocytoma, this would seem to make little practical difference.

(e) *False positives.*—False positives may appear as experience with the method increases. For this reason consistency with clinical and pharmacologic testing should be insisted on before advising adrenal exploration. In one such case, where preoperative catechol amine levels were 486 and 87 micrograms per twenty-four hours, exploration failed to reveal a tumor in the adrenal region. A high level is therefore not certainly diagnostic. In three cases proven at operation, levels have been consistently high (Table I).

(f) *False negatives.*—False negatives can occur if proper precautions are not taken in the collection. Also, it is possible that during a period of normotension no elevation of urinary catechol amines would occur. In such circumstances it might be better to obtain a specimen during an attack. For this purpose a four hour urine collection test has been devised (vide infra) but we do not yet have sufficient evidence of the normal range of such short collection periods during "attacks" associated with other causes than adrenaline release. Consequently, normal standards at present must be inferred from our experience with twenty-four hour urine samples. On this basis, a positive test should probably exceed 25 mcg. excretion in a four hour collection period.

(g) *Contraindications.*—None. It is to be emphasized, however, that this procedure should be done only when clinical criteria and pharmacologic testing are compatible, since a negative Regitine or histamine test is extremely unlikely to occur in the presence of a pheochromocytoma. Only when angina pectoris makes the latter tests dangerous to the patient should urine testing precede pharmacologic testing.

Diagnostic Procedures If Systolic Blood Pressure Is Below 200

1. *Histamine Test.*⁵

(a) *Procedures.*—Histamine acid phosphate solution is used. 0.0275 mg./cc. (= .01 mg. histamine base/cc.) is prepared fresh every month or so and stored in the refrigerator. The dilution represents 1/100th the strength of the 1/1000 histamine usually supplied. After the blood pressure has stabilized, give in 10 to 20 seconds 2.5 cc. (.025 mg. of the base) intravenously, taking blood pressure every thirty seconds in the opposite arm for five to ten minutes.

The usual response is a flush, vasodilator headache and transient hypotension lasting one to two minutes, followed by return to normal or slightly supernormal values in next three to five minutes. If the subsequent rise exceeds the pre-injection level by 30/20 mm. Hg., pheochromocytoma is suspected. Leave the needle in the vein after injection, so as to be prepared to give Regitine®, 5 mg. intravenously in case of a hypertensive reaction.

(b) *False positives.*—The reactions may be due to anxiety and discomfort from the histamine.

Rises usually do not exceed that observed by the cold pressor test. Reassurance, explanation of symptoms to be expected from test, and repetition often are needed to exclude. A certain number occur, nevertheless.

(c) *False negatives*.—Although rare, these also occur. Check with the Etamon test (see below).

(d) *Contraindications*:

- (1) Rarely give to patients with systolic blood pressure over 200 for fear of excessive hypertension. Have Regitine,[®] benzodioxane, nitrites present for antidotes.
- (2) Give rarely or never in the presence of angina or severe asthma. Reduce initial dose in seriously suspected cases or severe hypertension.
- (3) Always have Regitine[®] at hand and be prepared to administer it promptly if an attack is precipitated. Under these circumstances there is no need to fear reactions to this test.

2. *Tetraethylammonium (Etamon) Test*.⁶

(a) *Procedure*.—200 to 300 mg. of tetraethylammonium chloride (Etamon—Parke Davis) is given intravenously twenty to thirty seconds after blood pressure has become basal. The patient will notice paresthesias, blurring of vision and a mild tachycardia, and the blood pressure will fall 10 to 40 mm. systolic and diastolic in normals and mild hypertensives. In uremics and in some elderly patients with arteriosclerosis, more marked hypotension will occur but can be corrected promptly with a head down tilt or intravenous vasoconstrictors. Hence, over the age of fifty a dose of 200 mg. intravenously is sufficient for most routine tests. The effects last for 15 to 20 minutes, and orthostatic hypotension is the last to go away. Hence, these patients should be observed for syncope when they first get up after the test.

(b) *Interpretation*.—In the presence of pheochromocytoma most but not all patients show a marked secondary rise in blood pressure after the period of hypotension. The secondary rise should exceed the pre-injection blood pressure by 20 to 30 mm. Hg. A moderate rise in blood pressure occurring in young persons after tetraethylammonium, may be the source of a false positives. The test is not as likely to be positive as the histamine test.

(c) *Contraindications*.—None except in patients with extreme arteriosclerosis or angina, who should receive smaller than average doses. If an attack is precipitated, the patient should be made to sit up and hang his legs over the side of the bed, since orthostatic effects may cancel out part of the epinephrine-induced hypertension.

Procedure During Acute Attack of Hypertension

(These first two measures may be done by the patient after proper advance instructions.)

1. Record pulse, blood pressure.
2. Start a four-hour urine collection for catechol amines.

If the patient can remember the precise time of preceding voiding, force fluids and continue collection into an acidified bottle up to the fourth hour. If the exact time of the previous specimen is uncertain, the patient should void immediately and discard, then collect the following four hours of urine. Water should be taken to provide an adequate four-hour volume.

3. Take an electrocardiogram since transiently peaked T-waves may be associated with the hyperpotassemia of epinephrine release (See below).
4. Draw sample for blood sugar, which may show transient elevations, or test for glycosuria.
5. Give 2.5 mg. Regitine intravenously in forty-five seconds, recording pulse and blood pressure carefully. Patients in an attack are hypersensitive to Regitine, and a brief but marked response to a small dose is of diagnostic help.
6. If attack is serious, the further administration slowly of up to 10 mg. of Regitine should provide relief.

Clinical Observations

In general, it has been our practice to follow the outline above. We screen most patients with labile or established hypertension by means of pharmacologic tests. In our clinic, 136 tests were performed in the year 1956. Five apparent false positives were recorded among eighty-eight histamine tests and six among forty-eight Regitine tests. When clinical signs or confirmatory pharmacologic tests were positive, urinary catechol amines were determined. Table I reviews the

three positive cases which have been encountered during the past year.

Case Report

The patient described below proved of particular interest because his presenting complaint was recurrence of very brief spells of palpitation and irregular pulse on exertion.

R. J., a thirty-two-year-old male laboratory worker for a paint company entered the hospital with the chief complaint of "high blood pressure and weak spells" since November, 1954. He was essentially well until that date, when one afternoon at 3 p.m. he had an episode of weakness, pallor, perspiration and dizziness lasting ten to fifteen minutes after hurrying up a flight of stairs. No similar symptoms occurred until April, 1955, when an attack lasted ten minutes and was associated with an excruciating occipital headache. From April through June, 1955, these episodes occurred about weekly and almost exclusively in the late afternoon, except for one severe headache which awakened him at 6 a.m. and disappeared spontaneously in about ten minutes. A sequence of events elicited from the patient included an aura, described as a sensation of "draining of strength," followed by a throbbing headache, a slowing of the pulse and measured rise in blood pressure. At these times his face was observed to be ashen grey and his body was drenched with sweat.

Progressive impotence was another presenting symptom in this young man. Regitine and histamine tests done at another hospital were reported as "inconclusive" and intravenous pyelograms and blood sugar were normal. The patient's father had diabetes mellitus.

Examination revealed a healthy appearing and well muscled man with a casual blood pressure of 160/90 and pulse of 60 per minute. The pupils were dilated and the fundi showed no hypertensive or diabetic retinopathy. Skin was warm and moist. There were no tremors. The thyroid gland was not enlarged. Heart was normal in every way, including size, except for the bradycardia. Liver extended 4 to 5 cm. below the right costal margin, but no other abdominal or flank masses could be felt. Femoral and peripheral pulses were normal.

Laboratory studies showed a normal urine, stool and Kahn reaction. White blood count was 9,300, and there was a normal differential, with 18 per cent lymphocytes and 1 per cent eosinophils. Serum creatinine was 1.12 mg. per cent, and the clearance was 187 ml./24 hours. Nonprotein nitrogen was 33 mg. per cent. Basal metabolic rate was +15 per cent. Bromsulfalein retention in forty-five minutes was 15.9 per cent. Fasting blood sugar determination showed 129, 111, 107 (Somogyi-Nelson: normal is 60 to 90 mg. per cent). A glucose tolerance test run after a standard three-day preparation diet gave a diabetic type curve: fasting blood sugar, 107; at one hour, 250; at one and one-half hours, 205; at two hours, 164; at two and one-half hours, 138; at three hours, 119; at three and one-half hours, 104; and at four hours, 69 mg. per cent. A 4 plus glycosuria occurred from the first hour

through the second hour. No attack of symptoms of hypoglycemia appeared at the fourth hour.

While in the hospital his temperature reached 99° to 99.2° on only two days, pulse varied from 55 to 90 per minute and the blood pressure varied from 105 to 220 systolic and from 70 to 120 diastolic. A characteristic postural change in blood pressure and pulse was found. The recumbent blood pressure was 175/85 with a pulse of 72 per minute; it fell to 120/80 immediately upon standing, with a pulse of 128 per minute and to 145/110 after standing two minutes. During one of his attacks the patient noted a dull pain in the left flank (the side which proved to contain the tumor).

An interesting finding documented both at another hospital and here were the electrocardiographic changes during the attack; these included frequent ventricular premature beats, bradycardia and large narrow upright T-waves, the latter suggestive of an initial hyperkalemia. A subsequent electrocardiogram was entirely normal after the attack.

Regitine and benzodioxane tests were positive, as well as the aorta strip test. Catechol amines in the urine during an attack were 502 mcg. and 665 mcg. per twenty-four hour specimen of urine (normal range 10 to 100 mcg.). One Regitine test run during an active phase of the disease showed an unusual response. Just before the test dose of Regitine, the blood pressure was running 242-258/100-104 and diaphoresis was evident. Pulse was very slow, 56 to 60 per minute but no ectopic beats were present. Thirty seconds after 5 mgs. of Regitine was given intravenously, the blood pressure fell from 240/76 to 160/66, then rose abruptly to 300/142 in association with an agonizing headache and abdominal pain, pallor and diaphoresis. Pulse rose to 120. The attack subsided in approximately five minutes.

On June 28, 1956, after cortisone preparation, a simultaneous bilateral exposure revealed a tumor of the left adrenal gland. During manipulation of the tumor the blood pressure rose to 230/160 and fell to 90/60 as soon as the blood supply to it was clamped. The post-operative course was uneventful and the microscopic material was reported as typical for pheochromocytoma.

Three months later the patient was asymptomatic with a blood pressure of 130/65, and the glucose tolerance test was no longer diabetic in type.

Comment.—This patient presented four unusual features. His presenting symptoms had features in common with functional hypoglycemia and with attacks of premature ventricular beats. The complaint of impotence and the presence of an orthostatic blood pressure fall suggested widespread inhibition of sympathetic vasomotor tone. The development of upright T-waves of the hyperkalemic type during a paroxysm suggest a possible diagnostic test during an attack, although it must be emphasized that T-wave changes may occur from a variety of causes unrelated to serum

(Continued on Page 83)

Cerebral Angiography

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ALTHOUGH cerebral angiography is now a commonplace procedure, prejudice against its use still lingers in some quarters. In some of the vascular diseases it is irreplaceable, while in the problem of brain tumors, especially those located supratentorially, it may provide accurate and easy diagnosis, often making the cumbersome, time-honored air study unnecessary. The more one uses cerebral angiography the greater it increases in value, not only for positive identification of existent disease, but also as a survey tool to help exclude the presence of disease resulting in greater reassurance for both patient and doctor. That there are limitations to its diagnostic use and associated pitfalls, no one will deny; but as our familiarity with angiography grows these become more readily recognized and unsuspected information about patients is frequently uncovered, such as previously unrecognized vascular occlusions, vasospastic tendencies, and collateral circulations. The role of the variability of the caliber of intracranial vessels and rate of cerebral blood flow are virgin fields in which cerebral angiography may yet find further fruition.

The resistance to the performance of this procedure which the neurosurgeon still encounters from time to time frequently stems from early reports about mishaps associated with its use. Such accidents were not infrequent during the period of introduction of this technique. The high risk conditions were identified which stimulated technical refinements and led to the development of increased safety in cerebral angiography. Several recent reports attest to this point of view.¹⁻⁵ To further dispel unwarranted fear about this procedure this report is being made on 500 consecutive angiograms, all performed by the author, with only a single death in which the procedure can be implicated. Technical points which have enabled the achievement of this record will be discussed.

The 500 cerebral angiograms forming the basis of this report were done in 364 different patients, and all were performed percutaneously. The first sixty-two of these arteriograms were the basis for an earlier report on the use of urokon in cere-

bral angiography.⁶ In this series, 474 were carotid angiograms and twenty-six were vertebral. They were performed in fourteen different hospitals in the Detroit area, over half of them being done in one institution.*

The subjects were male in 289 of the arteriograms and female in 211. The age distribution is given in Table I. Of the entire group, 452 were done in patients between the ages of twenty and seventy. The youngest patient was three and one-half years of age and the oldest seventy-nine. A total of three arteriograms were done in two patients aged seventy-nine.

TABLE I. AGES OF PATIENTS

0 - 9.....	7
10 - 19.....	28
20 - 29.....	59
30 - 39.....	113
40 - 49.....	128
50 - 59.....	89
60 - 69.....	68
70 - 79.....	13
Total	500

All the angiograms done on children aged twelve or under were performed under general anesthesia except one done on a twelve-year-old boy who was awake during the procedure. Of the twenty-eight angiograms done in the age group ten to nineteen, seven were given general anesthesia and five were in patients in coma. Of the total group of 500 angiograms, forty-eight were done in patients in coma or under general anesthesia and 452 were done in conscious and responsive patients.

In 133 of the 364 patients receiving angiograms gross lesions were demonstrated (Table II).

TABLE II. PATHOLOGIC LESIONS FOUND BY ANGIOGRAPHY

Lesion	No.
Mass	78
Aneurysm	29
Malformation	8
Occlusion	8

These included seventy-eight mass intracranial lesions, twenty-nine aneurysms, eight vascular malformations, and eight major vascular occlusions (either middle cerebral or internal carotid). The

*Mt. Carmel Mercy Hospital.

anterior cerebral or the posterior cerebral system may at times not fill in the arteriogram, and such non-filling alone was not considered diagnostic of occlusion of these arteries. In addition important information was obtained in thirty-nine additional patients. These included twelve patients in whom a normal angiogram was relied upon to rule out a traumatic intracranial hematoma and twenty-seven patients in whom operative angiographic evaluation was essential, as in postoperative aneurysm patients to verify satisfactory obliteration of aneurysms by clips. Thus in 172 of 364 patients, information critical for the patients' management or diagnosis was revealed by the angiogram. In the remaining 192 patients, normal angiograms were obtained in patients suspected of serious gross intracranial disease. In twenty-two patients, the angiogram alone without an air study gave ample information for accurate localization of an intracranial mass, and in an additional seventeen patients angiography alone revealed the presence of a surface hematoma. In none of these thirty-nine patients was the angiogram in error.

Ill effects associated with cerebral angiography may be grouped in the following categories: (1) discomfort associated with performance of the test, (2) dye sensitivity, (3) air embolism (4) hematoma formation in the neck, (5) minor neurologic reactions, (6) major neurologic reactions, and (7) death. The first four of these did not present a serious problem in this series, but will be mentioned in subsequent portions of this paper. Included in minor neurologic reactions are transient neurologic incidents completely reversed in less than twenty-four hours (hemiparesis, hemisensory symptoms, aphasia, hemianopia), precipitation of a grand mal seizure without subsequent sequelae, and precipitation of an attack of atypical migraine (one patient). Such reactions occurred in conjunction with twenty-six arteriograms. In three of these patients a brain tumor was present.

The only serious ill effects of cerebral angiography in our experience in this group concerns the major neurological reactions (neurological incident lasting more than twenty-four hours) and death in which the arteriogram is implicated. There were six patients in whom major neurologic reactions developed and one patient in whom death occurred following the angiogram. In the latter, death in an already critically ill patient must be considered to have been hastened by the

test. Of the six patients with major neurologic reactions two had brain tumors, one had a ruptured cerebral aneurysm, and three had serious cerebrovascular disease. Four of these had full recovery of their neurologic incident in less than six months even though subsequent craniotomies were done in two. A fifth patient, a seventy-five-year-old man with left optic atrophy and mild mental changes tolerated the left arteriogram without incident, but on the day following the right arteriogram, despite demonstration of a right internal carotid artery occlusion, he developed weakness of the left upper extremity which was still present one month later. The sixth patient was a fifty-seven-year-old man with a malignant brain tumor, who developed a right hemiplegia and aphasia without loss of consciousness following the arteriogram. By the following day the hemiplegia had nearly completely recovered, but not the aphasia. His neurologic status was otherwise good. Craniotomy was performed on the next day and the patient expired on the first post-operative day. This was clearly a surgical death, and it is felt that the arteriogram was not a significant factor as a cause of death. The single death in this series in which angiography is culpable occurred in a forty-nine-year-old woman who had a recurrent subarachnoid hemorrhage one week after the initial bleeding. The arteriogram was done on the following morning and general anesthesia seemed advisable. She expired twelve hours later never having reacted from the anesthetic. In this case two safeguards discussed later were not adhered to: (1) A general anesthetic was used which camouflages any untoward reactions to a previous injection, and (2) two additional unnecessary injections were made because of failure of a new radiologic device.

Thus, there was a total of thirty-three reactions to arteriograms in this group of 500, an incidence of 6.6 per cent. Only seven of these (1.4 per cent) were serious. The one death constitutes an incidence of 0.2 per cent. It must be emphasized that this low rate of complications occurred in a group of patients with a high incidence of serious and critical illness. Omitted from consideration in this mortality rate are fifty-four additional patients known to have died at some time subsequent to the arteriogram. In forty-nine of these, death was distantly removed from the arteriogram and in no way could be



Fig. 1. Arteriogram (lateral view) made with 3 cc. of 30 per cent urokon. Note "stretched-out" pericallosal artery indicating hydrocephalus.



Fig. 2. Arteriogram (occipital view) made with 3 cc. of 30 per cent urokon. Note elevation of anterior cerebral artery caused by pituitary tumor.

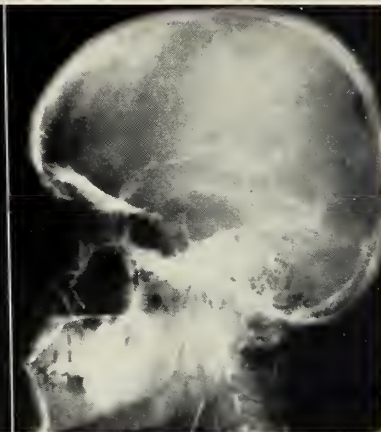


Fig. 3. Normal venogram (lateral view) made with 3 cc. of 30 per cent urokon.

considered to be influenced by it. In five patients, however, death occurred within twenty-four hours of the arteriogram, but each of these were comatose at the time of arteriography and showed no evident reaction to it, the cause of the coma in each being ample cause of his death.

Of the 500 arteriograms, 483 were done with 30 per cent urokon sodium. This became the medium of choice, although it should be stressed that the safety of this medium rests to a large measure also on the small quantities per injection which were used. In ten arteriograms, 35 per cent diodrast was employed in part or all of the test. In three arteriograms, lesser dilutions than 30 per cent of urokon⁶ were used, but the resulting films were not completely satisfactory. Four arteriograms in elderly or severely hypertensive patients were done utilizing thorotrast for some or all of the injections. In no instance was thorotrast injected unless the needle was cannulated far into the artery making extravasation impossible.

Of great importance in maintaining a safe technique is the reduction of trauma to the arterial tree not only in performing the arterial puncture, but by the reduction of the overall irritating stimuli to the intimal surface of the cerebral vascular system. In this regard, the total number of injections required for the arteriograms, the total quantity of contrast medium used, and the quantity of medium per injection are important factors. We have become increasingly impressed with the importance particularly of the

latter, the quantity of medium used per injection, and have been able to progressively decrease the amount used down to 5 cc. per injection and more recently to 3 cc. per injection and still to obtain good films almost consistently. Only 5 cc. quantities were used in 408 of the angiograms in this series, and in a total of 444 angiograms 5 cc. or less were used per injection. Most of those done using larger quantities were in the first part of this series (twenty-eight of the first forty-one).

Of the last twenty-nine angiograms done in this series, twenty-five were performed utilizing only 3 cc. per injection, and in each good arterial filling was demonstrated (Figs. 1 and 2). Venous visualization was also usually adequate (Fig. 3), but occasionally an injection might have to be repeated with a delayed exposure to get a good venogram unless a serial technique was used. Sixteen of these last twenty-nine arteriograms required only two injections of 3 cc. each—a total of 6 cc. per arteriogram!

The 500 angiograms required a total of 1281 injections. Two injections only were used for 230 angiograms. Eight patients required over five injections, one patient requiring eight. These excessive numbers of injections were needed for detail in multiple phases and/or perspectives in aneurysms or vascular malformation patients. In sixty-eight angiograms only a single injection was used. Occasionally, the test was stopped after the first injection because of an unfavorable reaction to that injection, but in the majority of instances single injections were used for a single

anterior-posterior view to determine presence or absence of shift of midline vessels or of a subdural or extradural hemorrhage. Additional injections for lateral views would have been superfluous.

Early in this series, several instances of a large total quantity of contrast medium being used are on record. In one instance, when injections of 10 cc. quantities were customary, as much as 60 cc. of 30 per cent urokon was used. Most of the other multiple injection arteriograms, however, when smaller quantities were used, do not represent such a large total quantity of medium. Thus, one arteriogram was done using eight injections and a total of 40 cc. of media, another needed seven injections and a total of 35 cc., and four required six injections and 30 cc. each. More recently a six-injection arteriogram was required, in which only 3 cc. per injection was used, or a total of only 18 cc.

Of the 1281 injections of dye made, thirty-two were partly or completely extravascular. Such injections caused immediate increased pain during and shortly after the injection. Otherwise no other ill effects occurred except in one patient who suffered an immediate minor neurologic reaction with a quick complete recovery. In none of these thirty-two cases was thorotrast used. Several times x-rays of the neck subsequently demonstrated complete absorption of the dye within a few hours. An injection of urokon and diodrast outside the lumen of the carotid artery meets greater resistance and creates severe local pain in the neck, ear and jaw which subsides within a few minutes. An injection outside the lumen of the vertebral artery causes severe pain in the shoulder and arm, which likewise usually subsides in a few minutes. In one such instance, brachialgia lasted several days probably because an associated nerve root at that site was irritated by the dye.

Discussion

A good safety record can be maintained by adhering to two prophylactic concepts. The first is care in selection of patients, and where greater risk patients must be subjected to the test, rigid attention to safety features in technique must be applied. The second is a constant respect during technical performance of the test for its potential hazards with corresponding insistence on efficient, safe technique. Despite faithful application of these two principles, some reactions will

still occur, but with proper safeguards they can ordinarily be rendered innocuous. These contentions do not deny the need for still further technical improvements. As of this writing, two major advances are still needed: (1) The development of a more perfect contrast medium (one which will provide good contrast, but which is still painless, nonirritating, nonradioactive, and readily excreted or destroyed by the body); and (2) a more dependable simple technique for vertebral angiography.

In accepting a patient for this test, there is comfort in the knowledge that in most patients there is a large margin of safety with regard to neurologic accidents or fatalities. These patients will tolerate a traumatic arterial puncture, repeated large injections of contrast medium, extravascular injections, and sundry other insults without neurologic sequelae. There is a significant number, however, who beforehand give warning of potential complications. These include the aged, the arteriosclerotic, the hypertensive, patients who have recently bled from aneurysm, and the patient with a known intracranial mass lesion. Then there is still another group of patients who give no such warning, but who for some unknown reason tolerate a local vascular insult such as caused by injection of contrast medium less well than others. Patients in whom this is likely to occur cannot be recognized in advance, but will show their intolerance to the procedure by neurologic reactions during the performance of the test. In both these latter groups a neurologic reaction following an injection of dye or even to attempted cannulation of the artery is a danger signal for trouble ahead, which if ignored is apt to lead to a disastrous complication. Thus, a patient who, following the first injection, is unable to move the contralateral extremities fully, or who complains of numbness in those parts, or who is having speech trouble, when subjected to a repeated vascular trauma with another severe injection may have such a transient complication converted to a more permanent one. It is important for the operator to know "where his patient is" after each injection. For this reason we believe that the procedure should be done under local anesthetic in a fully-awake patient whenever possible. It can be made to be nearly pain free and tolerable under local anesthetic only. We do not hold with those that believe that the theoretical benefit of relaxation of cerebral ves-

sels under general anesthesia overcomes the advantage of knowing that your patient has not reacted well to the injection just given. In an anesthetized patient this reaction is masked. When it is necessary to do cerebral angiography in an unconscious patient or in one in whom general anesthesia cannot be avoided, as in children or grossly irrational patients (in whom restraining head and extremity compression straps are inadequate), it is important that the number of injections (small quantities) be kept to a minimum and ample rest periods for recovery be allowed between injections.

Often, therefore, it is possible to cut short the usual technique as soon as the problem is solved. In a stuporous or comatose patient, for example, in whom a surface hematoma is suspected, who shows in the first film (an anterior-posterior view) a significant shift of anterior cerebral arteries to one side with a pathognomonic free space between cortical vessels and calvarium indicating a surface hematoma, there is no need to risk a second injection trauma to obtain a lateral view. Angiograms, therefore, should be done only by those persons who are fully aware of the problems of the case and who will carry out the definitive therapy. In this way, injections which will yield little or no clinical information may be avoided.

Other occasions develop where a purely neurosurgical decision of clinical management is made during the course of the performance of the test as the wet films are seen following each injection. These may include cessation of the test, need for certain oblique views, demonstration of collateral ability of Circle of Willis, legibility and adequacy of the films, et cetera. This procedure may be accepted once by the patient without much complaint, but he is apt to be bitter if a repetition is needed because of some oversight when it was first performed. If the responsibility of this test is placed upon a resident in training, he must be prepared to make accurate and complete neurosurgical diagnosis as he goes along or have each set of films as they are developed interpreted for him by someone who can.

Technique

One cannot underestimate the importance of technique when considering the safety of cerebral angiography. Unlike some medical investigative procedures, the outcome of this test may depend on the care and efficiency with which it is done

by different operators. Safe angiography may be done in a variety of ways, the differences in technique depending upon the operator's preferences, the radiologic facilities available, and the patient's disease. Angiography as done by a single operator always in the same institution may not be suitable for the itinerant neurosurgeon who answers consultations in many institutions. It is not always feasible or safe to transfer a patient who may benefit from the information obtained by the test from one institution to another solely for the performance of angiography. The technique which was developed and has been utilized for most of the patients in this series has proven itself to be safe, reliable and simple, and easily adaptable to any general hospital, even though it is utilized there rarely. Experience with several specially built units for taking multiple serial films has failed to prove their value to the author for routine angiographic diagnosis. In the occasional circumstance where interval exposures beyond the customary arteriographic and venographic phases may be needed, they can be readily obtained by another injection and timing of exposures earlier or later than is usual. Thus the elimination of special equipment has enabled increased utility of this test.

Several features of technique deserve comment. Especially in hospitals where the personnel are unfamiliar with cerebral angiography, it is important that the neurosurgeon take complete charge of the procedure, especially from the radiologic point of view. If he yields to the factors, patient positions, tube position, cassette position imposed by a technician inexperienced in this test and somewhat in variance with his own experience, he will frequently end up with an underexposed film or one showing the head rotated or not properly centered. If necessary, it is wise before actual performance to take one or more exposures of the head in the test position to perfect technique. Unnecessary injections which increase both the pain and the hazard may be reduced by proper planning.

Preference for local anesthesia has already been stressed in order that greater control over and prevention of untoward reactions may be achieved by the operator. With experience the test may be made to be almost pain free. Ordinarily, aside from the pain associated with the introduction of local anesthesia, there is momentary sharp pain as the needle pierces the carotid artery and



Fig. 4. Fixing and transfixing the artery.

again as the needle is withdrawn at the completion of the test while pressure is being made against the puncture site to prevent local hematoma. Description of the discomfort associated with injection varies with the patient and the amount, the type and rate of injection of the contrast medium. A rapid injection of 5 cc. of 30 per cent urokon into the common carotid artery is accompanied by a sudden stinging, burning sensation in the homolateral side of the face and behind the eye. It tastes bitter and often induces the sensation of something flushing through the mouth, and the patient may desire to expectorate. A calm stoic patient will report it not to be painful but to burn as though on fire for an instant. In a small per cent of patients a moment or two later there may be nausea or actual gagging. This pain is considerably reduced when only 3 cc. is used, and the patient verbalizes little distress from the experience.

Although intracarotid injection of thorotrast is painless, it is retained in the body and may be seen years later in quantity in liver and spleen, and its malignancy provoking possibility has been indicted many times. Moreover, in a percutaneous injection any extravasation could lead to serious late cicatricial changes in the neck. Its use, therefore, may be justified only in elderly patients or severe hypertensives where the danger of immediate reaction is high. The newer media, hypaque and renograffin, are now receiving trial and show promise of being less irritating than 30 per cent urokon.

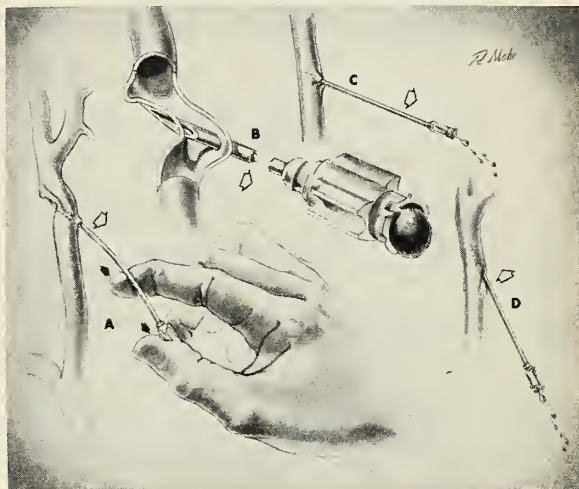


Fig. 5. Cannulating the artery (See text).

The performance of the test involves two steps: (1) the cannulation of the artery, and (2) the injection. For carotid angiography it is almost always the common, which is more accessible than the internal carotid artery, that is punctured. The demand for vertebral angiography is infrequent and the technique less dependable. Expertness in performing carotid cannulation ensures a minimum of pain and a maximum of safety and success. Although specially designed needles are preferred by some, an ordinary sharp No. 18 spinal puncture needle has proved adequate in this series. The operator first aims to transfix the artery with the needle, bevel down. *This necessitates fixing the artery against lateral or medial movement with perfect control.* If it

cannot be readily done between the fingers, the use of an accessory needle placed down to the transverse process medial to the artery against which it may be held, is of inestimable value (Fig. 4). Successful impaling of the artery is deter-

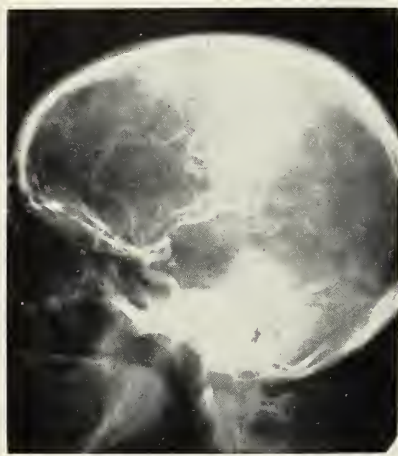


Fig. 6. Angiogram (lateral view) made with 5 cc. of 30 per cent urokon showing large arterio-venous malformation. Note complete filling of early phase with only 5 cc.

mined by slow withdrawal of the spinal puncture needle with its stylette out until a show of blood is seen at the open bore. After transfixation of the artery has thus been secured, the operator next aims at cannulating the artery as follows. Further slow withdrawal of the needle is continued and while doing so appropriate pressures are exerted against the needle to cause the artery to be raised up by the needle point (Fig. 5) until the needle is felt to "pop" into the lumen much as a needle "pops" through the dura in doing a lumbar puncture. This is accompanied simultaneously by a pulsating spurt of blood out of the needle, indicating the needle bevel to be entirely within the lumen of the artery. The needle may then be threaded up the artery a safe distance to insure total intraluminal injection of dye, usually one-fourth to one-half inches or more. The stylette is then replaced in the needle until the injection is ready to be made. The needle may be left in situ as long as needed.

The injections are made by attaching a 10 cc. plain tip syringe containing the contrast medium directly to the needle. Continuous irrigation of the needle system is thus safely omitted. Elimination of the irrigation system not only simplifies the technique, but enables the use of smaller quan-

ties of dye. It is doubtful that uniformly successful angiograms can be obtained with as little as 3 to 5 cc. of medium if the dead space of irrigating tubing is interposed between syringe and needle. Moreover, facial petechiae which have been reported after this test do not occur when the irrigation system is eliminated. Evidently their occurrence indicates inadvertent injection of air trapped in the tubing. With the use of small quantities of dye (3 to 5 cc.), care must be taken not to allow blood to enter the syringe in any quantity before the injection is made unless the bolus of dye is diluted. The operator soon becomes proficient in how rapidly to inject the dye and when to make the exposures, and rarely misses obtaining appropriately timed films, both in the arteriographic and venous phases.

It is of interest that huge vascular lesions may be visualized in their entirety in all phases utilizing 5 cc. of dye or less (Fig. 6). It is also probably true that such large lesions may have greater than a 5 cc. total fluid capacity in their arterial or venous phases yet visualize completely with a smaller quantity of contrast medium. This may be due to the fact that the x-ray exposure is not instantaneous and visualizes the dye as it travels through the arterial or venous tree for a given period of time, if only brief. Cinefluorographic angiography⁷ has shown with what rapidity blood flows through the cerebral vascular system. A quantity of dye insufficient to fill the entire arterial system in a given instance may, therefore, during a brief but finite interval, which is being filmed, fill out the entire vascular silhouette.

As a rule it is necessary to make only two injections, the first for an arteriographic view in the anterior-posterior projection, and the second for both arteriographic and venous phases in the lateral projection. The two phases may be obtained by manually changing the cassettes rapidly and making two properly timed exposures. Individual circumstances may vary this routine, however, since at times more than two injections may be needed where at other times a single injection for the anterior-posterior view may solve the problem in question. Interval phases between and after the arteriographic and venous phases may be needed for completeness in arteriovenous malformations or certain vascular tumors, and additional oblique views are often necessary for complete delineation of aneurysms. Flexibility with regard to the number of films and views needed

to answer the special needs of individual cases should be the keynote, bearing in mind at all times, however, that the fewer injections made the less likely the patient will react unfavorably. Adequate rest periods between injections are ordinarily provided if one waits to develop and view each set of films before proceeding with the next.

It is wise to take the lateral views on grid cassettes without turning the patient's head to offer less chance for the needle to be dislodged. This also simplifies the manual changing of cassettes for the two routine phases. The anterior-posterior projection, if taken with a 30° to 40° tilt as used in obtaining an occipital or Towne view of the skull, is apt to be more informative than a straight perpendicular projection, since then a longer view is obtained of the important midline pericallosal artery as well as the Sylvian vessels. Any shift from the midline of the former vessel is more evident in the longer view than when it is foreshortened as in a straight perpendicular view. Medial displacements of the Sylvian vessels away from the calvarium are similarly more evident in the longer occipital projection. Moreover, overlapping orbital and frontal sinus bony detail present in a perpendicular anterior-posterior film is thrown out of the field of the arteries in the occipital view.

If the time exposure is kept to one-fourth second or less, any movement that the patient may make in reacting to the injection will occur after the exposure is complete. He should be forewarned when the injection is about to be made. These precautions usually suffice in obtaining good quality films without motion, but occasionally head restraints or even general anesthesia are indicated.

The operator should be protected by a leaded shield placed over the patient's chin or neck between the needle and the rest of the patient's head, or by an extension cone or cylinder reaching nearly to the head which keeps the operator's hands out of any direct x-ray beam.

A percutaneous vertebral arteriogram technique as reliable, safe and simple as the carotid technique has not been developed. Success in obtaining good vertebral angiograms may be expected about 75 per cent of the time. Myelographic visualization of the main branches of the basilar artery system for aneurysms and displacement may be safely achieved by the use of the technique of

Mellins,⁸ but this is of limited value, although not difficult to accomplish.

On withdrawal of the needle following carotid angiography, immediate firm finger pressure at the site of puncture for a few minutes, which is somewhat uncomfortable, will prevent any significant hematoma formation. Greater care in this regard is needed in hypertensives and in the aged. Although a large number of minor hematomas in the neck have occurred, which contributes to the neck soreness which follows the test for a few days, none in this series has ever caused serious inconvenience nor have any had to be evacuated. Following vertebral angiography the site of puncture cannot be compressed, yet no ill effects following needle removal have been seen. It is recommended that the patient remain recumbent for two hours following angiography.

Summary

The author's experience with 500 consecutive cerebral angiograms performed in 364 patients is presented from the point of view of safety and yield of information. The total incidence of reaction was 6.6 per cent, but only 1.4 per cent for serious reactions, and the single death in which the test might be causally involved constituted an incidence of 0.2 per cent. Details of technique which enabled achievement of this record are discussed, including the recent use of 3 cc. of contrast media per injection.

Information critical for the diagnosis or the management of the patient was obtained in 172 of the 374 patients. In thirty-nine patients angiography alone without air study provided ample information for neurosurgical identification and localization of an intracranial mass or a surface hematoma.

Addendum

Since the preparation of this paper, more than 100 additional angiograms have been performed utilizing 3 to 4 cc. of dye per injection. Not a single major complication has occurred. Hypaque sodium (50 per cent) was used in almost all of this group and when injected into the internal carotid artery resulted in excellent contrast without producing pain. In 3 to 4 cc. quantities, it has become our medium of choice.

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Anomalous Left Coronary Artery and Endocardial Fibroelastosis

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TO THE PHYSICIAN whose practice is concerned with or limited to patients in the pediatric age group, sudden and clinically unexplainable death in a previously apparently healthy infant or child is a most distressing happening.

Farber,¹ in his timely work on this problem, refuted the myth of the thymus gland as the cause in itself of sudden death, and cast serious doubts on many of the other more or less accepted reasons for this highly disturbing occurrence. At the same time, Farber quite definitely established the roll of various fulminating and unrecognized infections as the almost universal cause of these "sudden deaths."

Recently, Adelson and Kinney,² in a comprehensive study of 126 consecutive cases of sudden unexpected death in children between the ages of ten days and two years, have again pointed up the almost universal role of severe fulminating infections in all instances of sudden death other than traumatic.

Two of the less frequently occurring and most often unrecognized causes for sudden or very rapidly occurring death in an infant who had previously given no clinical evidence of disease or anomaly, are anomalous left coronary artery and its counterpart in clinical course and manifestations, endocardial fibroelastosis.

This paper presents a review of the literature and cases of each of these uncommon conditions in which the ages, past histories and clinical courses were remarkably similar, and where diagnosis of the cause of their rapid demise was established only at the necropsy table.

Historical Data

The first report of anomalous left coronary artery was by Abrikosoff³ in 1911. It was six years later that Heitzmann⁴ reported an identical case and called attention to the similarity of the

pathologic findings to those resulting from coronary occlusion in adults. In 1934, this entity was described in detail by Bland, Garland, and White.⁵ It was from this report that the anomaly received its occasional name of "Bland—Garland—White Syndrome."

To this date, there have been approximately forty cases of this anomaly reported in the literature. All have essentially similar findings.

The companion entity, endocardial fibroelastosis, was first described in 1818 by Kreysig.⁶ For a century it seems to have been either unrecognized or considered a facet of myocarditis. Then, in 1918, Potoschnig⁷ reported this condition and suggested that it was noninflammatory and deserved further investigation. There appears to have been further lack of recognition of the entity until 1941 when Gross⁸ reviewed the subject. Investigators then began to consider the condition with the congenital anomalies of the heart. It was given its present name by Weinberg and Himmelfarb⁹ in 1943. Many more cases have been reported since that time, some of which were suspected clinically and verified at necropsy.

The Clinical Picture

The symptomatology of these two disorders is essentially identical. The infant, usually born normally at full term, appears normal at birth and for several weeks to months thereafter. Then the parents note the onset of attacks of pain, especially at the time of feeding. Respirations become short and grunty and the infant frequently pulls up his knees as if having colic. Later there is sweating, apparent shock and frequently cyanosis. It is now accepted that these attacks represent angina pectoris. Physical examination and chest roentgenogram show evidence of cardiac enlargement. Electrocardiogram shows signs of myocardial hypoxia as well as left ventricular hypertrophy. Cardiac catheterization has been of little help in distinguishing the two entities.

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Pathology

The findings at necropsy are characteristic. There is considerable enlargement of the heart, particularly of the left ventricle, due both to dilatation and hypertrophy. In the first condition, the changes are predominantly in the distribution of the left coronary artery. The endocardium of the affected area is usually thickened and gray, due to associated endocardial fibroelastosis. The left ventricular myocardium may appear scarred on gross inspection, and usually will exhibit scarring on microscopic examination. These are typical of scars due to myocardial infarction and, according to Bland et al,⁵ tend to be concentrated near the endocardial side of the myocardium of the left ventricle. The myocardium will frequently also show focal areas of calcification. These are generally thought to be necrotic muscle. Acutely infarcted myocardium is sometimes evident. Endothelial-lined blood-containing sinusoids are frequently present in the myocardium of the left ventricle and these are quite striking when seen. The pathologic findings typical of endocardial fibroelastosis are essentially the same but without the anomalous coronary artery.

We wish to present one case of anomalous left coronary artery, and two cases of endocardial fibroelastosis for the record.

Case Reports

Case 1.—K. J., a four-week-old girl, was born normally of healthy parents. There were no other children. Her course in the hospital was uneventful. She was discharged in apparently good condition, and when examined two weeks later by her physician was in good condition and had made normal progress. When one month of age the parents reported that she was very fussy at feeding time. She would take about one ounce of formula and would pull up her knees and "scream" as though in great pain. She was given an appointment for office examination but shortly before that time the physician received an "emergency" call, stating the baby had another episode of severe pain, had vomited and then stopped breathing. Prompt and accepted attempts at resuscitation were of no avail.

Necropsy Findings.—Significant abnormalities were limited to the heart. The pericardial cavity was greatly distended and contained 85 cc. of blood-tinged fluid. The greatest transverse diameter was 4 cm.; the weight 42 grams. The coronary arteries were anomalous in that the left coronary originated from the pulmonary trunk. The left coronary was limited to the descending branch. The right coronary originated from the aortic trunk and was normal. The left ventricular wall varied in thickness from 5 to 7 mm.; the right 3 to 4

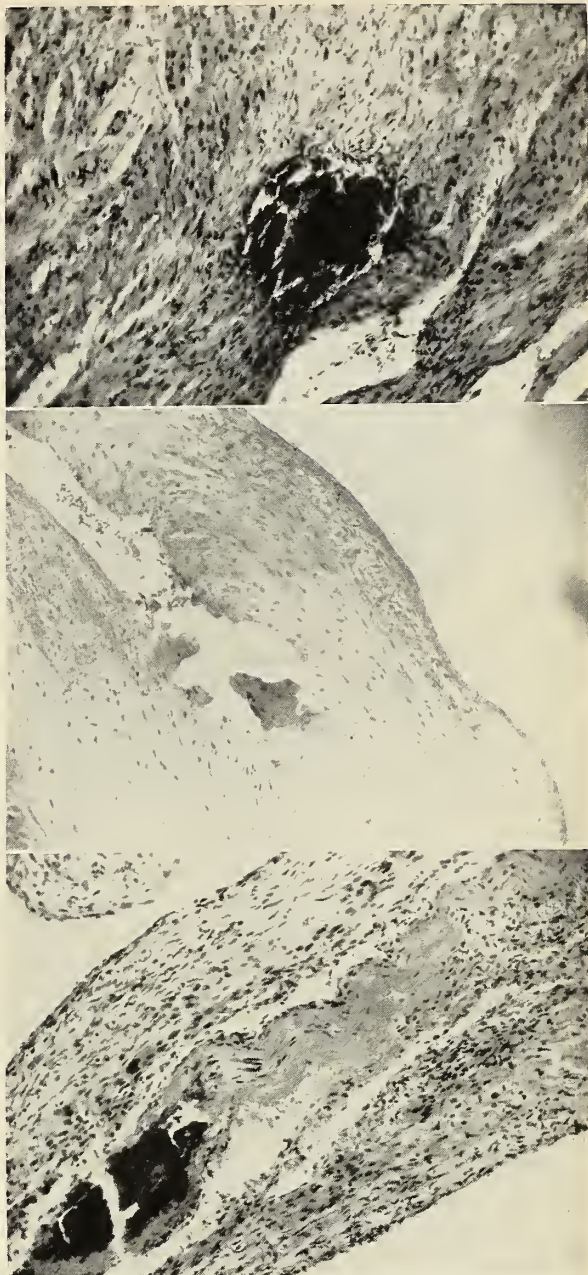


Fig. 1. (above) Case 1.—Myocardium showing the necrosis and focal calcification in ischemic areas.

Fig. 2. (center) Case 1.—Myocardium showing blood filled, endothelial lined sinusoids (x 150).

Fig. 3. (below) Case 1.—Papillary myocardium exhibiting necrosis and focal calcification.

mm. The lateral aspect of the wall of the left ventricle exhibited an area of brownish discoloration 1 cm. in diameter lying beneath the endocardium and extending 2 to 3 cm. into the myocardium. The valves were grossly normal, as were other features of the heart.

Micropathology.—Myocardial fibers were hypertrophied, particularly of the left ventricular wall. There was a moderate amount of generalized interstitial edema.

Sections through the wall in the area of the above-described discoloration revealed several scars particularly beneath the endocardium. In several areas there was necrosis of the myocardial fibers. There were focal

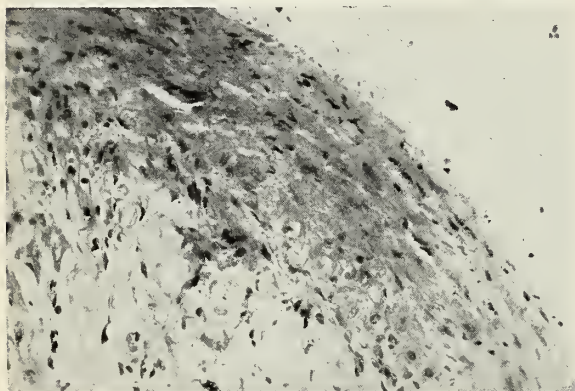


Fig. 4. Case 2.—Ventricular myocardium exhibiting endocardial fibrous thickening and vacuolization of underlying myocardium.

areas of calcification among the necrotic muscle bundles. Many of the papillary muscles exhibited focal areas of necrosis and calcification. The endocardium in the areas of myocardial involvement was greatly thickened due to an excess of fibrous and elastic tissue. There was no evidence of inflammatory cell infiltration.

Pathologic Diagnosis.—Anomalous origin of left coronary artery from the pulmonary trunk. Coronary artery insufficiency and acute myocardial infarction. Cardiac hypertrophy, dilatation and acute congestive failure.

Case 2.—H. U., a five-month-old, white female child was born by normal spontaneous delivery after a normal pregnancy. No physical abnormalities were noted in the postnatal physical examination. Both parents were in good health. A two-year-old brother, normal and in good health, was the only sibling. She was examined regularly at monthly intervals according to accepted pediatric standards and her progress was good. Her mental and physical development were normal. She had no illnesses until she was five months old, at which time she had an acute adenotonsillitis, uncomplicated. She received penicillin therapy and routine symptomatic treatment. Her clinical improvement was prompt and satisfactory for four days, but then she again became febrile, irritable and anorexic. She vomited persistently. Her physician was called on the fifth day and when she was seen was extremely and critically ill. Her color was ashen gray, respirations were rapid, grunting, and labored. Breath sounds were bronchial in character over both upper lung fields more marked on the left. Clinical diagnosis of pneumonia, and dehydration was made, with the possibility of previously unrecognized cardiomegaly.

The infant was promptly hospitalized; placed in oxygen, parenteral fluids started, and she was given streptomycin-penicillin therapy.

Chest roentgenogram showed marked cardiac enlargement involving chiefly the left side of the heart, and bilateral bronchopneumonia.

She remained cyanotic and had increasing respiratory distress, even in high oxygen concentration, and expired six hours after admission.

Autopsy Findings.—Pathology was limited to the heart and lungs. Both ventricles were markedly dilated.

The mitral valve leaflets and the endocardium showed white fibrous thickening. Microscopically there was edema of the interstitial connective tissue, of the myocardium and patchy fibroelastosis throughout. The endocardium was thickened by fibrosed elastic fibers. Bundles of atypical clear cells were found beneath the endocardium. The mitral valve leaflets were thickened and showed both fibrosis and degenerative changes.

The lungs exhibited a patchy consolidation of all lobes, which microscopically proved to be entirely edema.

Pathologic Diagnosis.—Myocardial failure due to endocardial and myocardial fibroelastosis.

Case 3.—C. C., a five-months-old, white male infant, was born by normal spontaneous delivery after a normal pregnancy. The mother was Rh negative. Cord blood was Coombs negative and showed a bilirubin of 1.7 mg. per cent. Growth and development were normal during his five months of life. He became ill during the day prior to admission with persistent vomiting, was restless and irritable and cried constantly. The following day his physician was called and he felt that the child's condition was critical, and advised immediate hospitalization. His temperature was 104° rectally on admission. He was cyanotic, respirations were rapid and labored, and breath sounds were bronchial in character over both upper lobes but more marked on the left. Parenteral fluids, oxygen and vigorous antibiotic therapy was started, but he expired one and one-half hours after admission.

Autopsy Findings.—The pericardial cavity contained 30 cc. of straw-colored fluid. The heart was markedly enlarged and when emptied of its contents weighed 108 grams, with the greatest transverse diameter being 6.5 cm. The coronary arteries were normal in origin and distribution. The myocardium was hypertrophied and flabby. Both ventricles were markedly dilated. There were no anomalies of the heart or great vessels. The endocardium was opaque, white and thickened.

Microscopically the myocardium of the left ventricular wall showed marked hypertrophy of uneven distribution. The endocardium of the left ventricle was markedly thickened. There were numerous trabeculae of dense connective tissue extending into the myocardium with partial degeneration of some of the myocardial fibers. There was no myocardial infarction, nor any inflammatory myocarditis or endocarditis. The lungs, liver, spleen and kidneys showed marked congestion.

The pathologic diagnosis was congenital endocardial fibroelastosis with left ventricular cardiac hypertrophy and acute congestive heart failure.

Comments and Summary

Sudden and unexpected death in an apparently previously healthy infant or child is a most shocking and distressing occurrence to both the physician and the family. For years most of these sudden deaths were attributed to hypertrophy of the thymus gland and/or status thymico lymphaticus. Since 1924 when Farber first refuted this then current and accepted cause of death, and established fulminating infection as the most universal cause of all sudden, other than traumatic deaths, numerous articles have been published confirming his findings.

Three cases of sudden, unexpected and clinically unexplained death are reported by us, which are neither on a traumatic or infection basis, and which indicate that in any similar situation, the possibility of endocardial fibroelastosis or anomalous left coronary artery should be included by the physician in his differential diagnosis.

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DIAGNOSIS OF PHEOCHROMOCYTOMA

(Continued from Page 71)

potassium levels. Finally, the occurrence of an attack immediately following Regitine at first seems paradoxical but probably represents a reaction to the transient hypotension produced immediately following the injection.

Conclusions

1. A routine screening procedure for the diagnosis of pheochromocytoma is presented.
2. Emphasis is placed on the measurement of urinary catechol amines to confirm apparent positive pharmacologic tests.
3. Specific procedures to be performed by patient or physician during a suspected attack are outlined. The possible diagnostic usefulness of electrocardiographic changes during an attack are pointed out on the basis of our experience with one such case.

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Diagnosis of the Operable Arterial Lesion

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REPLACEMENT of diseased arteries has become a fairly common practice. Accordingly, many individuals who formerly had to live with an arterial incapacity may now be safely and adequately treated by means of surgery. This development has come within the past few years. Formerly, such replacement was possible only in institutions where it was possible to obtain fresh homografts promptly when needed, and under aseptic conditions. With the discovery of methods for preservation and sterilization of homografts, arterial replacement has become more practical. Many of the lesions which would be untreatable, were it not possible to replace the defects resulting from resection, have become operable.¹ The conditions which have become suitable for treatment by use of the arterial homograft are briefly reviewed below, in conjunction with a practical method for arteriography and reference to a practical arterial bank.

Aneurysms

Aneurysms are an important group of conditions in which homografting has made remarkable differences in therapy. They may be classified according to cause as secondary to trauma, arteriosclerosis, syphilis, and mycotic disease. According to shape, they may be saccular, fusiform, dissecting, miliary, or cirroid. For the purpose of treatment and diagnosis, they are best discussed according to location.

Thoracic aneurysms^{2,3} are located in the ascending aorta in 70 per cent of the cases, according to Kampmeier. The association with syphilis has been common. They cause symptoms by pressure against the esophagus, trachea, left recurrent laryngeal nerve, and erode into the vertebrae. Accordingly, symptoms of dysphagia, hoarseness, difficult breathing, and back pain develop. A tracheal tug may exist. Signs of dullness over the chest and dilatation of the aortic valve may be present. X-ray studies of

the chest will usually be diagnostic, demonstrating the size and calcium deposition in the wall. Transthoracic aortography as well as angiocardiology have been used. The average survival after onset of symptoms is six to nine months, frequently terminating with hemorrhage. In the past, treatment has been in the form of wiring or wrapping with cellophane. Currently, resectional therapy with grafting has been reported.

*Dissecting aneurysms*⁴ most frequently begin as a primary tear of the ascending aorta in advanced arteriosclerosis, dissecting within the layers of the media. The onset is usually sudden with agonizing tearing pain in the thorax and intercostal distribution. Interference with the blood supply of the spinal cord may produce paralysis. Pain often progresses distally with the development of shock, and the loss of pulses in variable peripheral arteries. DeBakey and Cooley have treated these by the creation of a re-entry passage into the aortic lumen above with the obliteration of the false passage below. Results are encouraging.

Abdominal aortic aneurysms^{5,6} nearly always develop distal to the renal vessels, and are usually arteriosclerotic in origin, occurring in the age group past sixty years. They may extend into either or both common iliac arteries, on occasion obstructing one or both ureters. Symptoms may be minimal, frequently with low back pain. Abdominal pain usually indicates slow perforation or leakage of the aneurysmal sac of varying severity and rapidity. They present themselves as palpable pulsatile masses at the level of the umbilicus, usually lying slightly to the left. A hand placed on each side will give the impression of width and lateral pulsation. The scout film of the abdomen may show a rim of calcification, and the pyelograms lateral displacement of the ureters. Translumbar aortography may confirm the suspicion, although the lamination of clot frequently prevents adequate filling to indicate the full size of the aneurysm. Resectional surgery with replace-

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ment by a homograft or plastic prosthesis is the current generally accepted treatment. Survival is 80 to 85 per cent in elective cases. Acute rupture of the abdominal aneurysm is recognized by acute abdominal pain and peritoneal tenderness accompanied by shock in an individual with a pulsating abdominal mass. Emergency surgery with the replacement of the aorta gives a variable 50 per cent survival.

*Peripheral aneurysms*⁷ have occurred in all major arteries of the neck and extremities. They are secondary to trauma, as gunshot wounds and stab wounds. Arteriosclerosis is a frequent cause in the popliteal region. The mycotic variety occurs in individuals with bacterial endocarditis. A localized, expansile, pulsating, swelling develops over one of the arteries. Auscultation reveals a systolic murmur. Pressure on the artery proximal to the sac will decrease the murmur, size, and pulsations. An arteriogram is of value. Thrombosis, embolism, gangrene, pressure on veins and nerves, and rupture are possible sequelae. Treatment consists of endo-aneurysmorrhaphy, or excision with grafting by an autogenous vein or homologous artery.

Occlusion

Superficial femoral occlusion^{8,9} may involve all or only a portion of this vessel, frequently first developing in the region of the distal adductor canal and progressing proximally to the deep femoral artery. Symptoms are those of calf claudication with mild exercise. Ankle or foot ulcers may develop and be confused with varicose ulcers. They are frequently on the toes or on the lateral ankle instead of over the medial malleolus. The dorsalis pedis, posterior tibial, and popliteal pulses are absent or feeble. The popliteal pulse can frequently be best palpated with the patient lying on his abdomen and the knees flexed at 45°, using the foot of the bed to support the feet so that the hamstring muscles can be relaxed. Unless there is a higher obstruction, femoral pulses will be present and of good quality. Femoral arteriography will determine and record the extent of the obstruction. Replacement or by-pass by a homologous artery or autogenous vein is indicated if a patent popliteal segment is present.

*Iliac and/or femoral occlusion*¹⁰ may exist on one or both sides with or without a patent super-

ficial femoral vessel. All the signs of arterial insufficiency existing in the superficial femoral artery occlusion will be present. In addition, the femoral pulse is absent or feeble, or the thrombosed vessel is palpable. The immediate aortogram will show the block and a delayed "aorto-femoral" arteriogram should demonstrate the collateral and possible distal communication with the superficial femoral vessel. For years, sympathectomy has been the treatment of choice; but this was usually only temporarily palliative. Currently a homologous graft to by-pass the obstruction is indicated, providing a patent distal segment exists. We have used grafts up to 55 cm. with good results to restore arterial flow and eliminate claudication.

*Abdominal aortic occlusion*¹¹ may occur in varying degrees and extend distal to the renal arteries with or without occlusion of the iliac and femoral arteries. As such, it was described by Leriche in 1940. There is intermittent claudication of the calves, thighs, buttocks, and lumbar region with a sensation of coldness and numbness of the extremities. Impotency may exist with bilateral, internal iliac involvement. There may be loss of hair, with skin and muscle atrophy. Pulses of the femoral, popliteal, dorsalis pedis and posterior tibial region are absent or occasionally feeble. Oscillometric readings and skin temperatures are useful in determining the degree of arterial insufficiency. Translumbar aortography is indicated to determine and record the extent of obstruction. Resection of the aortic bifurcation with an arterial homograft, or on occasion, a plastic prosthetic replacement, should be considered. Thromboendarterectomy is used on occasion. Lumbar sympathectomy may be added but there is some question of its advantages.

*Occlusion of the thoracic aorta*¹² occurs as a coarctation either proximal or distal to the ductus arteriosus. If the ductus is distal to the coarctation, it is of the infantile type and prognosis is poor, usually with death in infancy. If the ductus is proximal, as in the adult type, the collateral circulation will develop and prognosis is favorable. In the adult type, the lower extremity pulse and pressure are diminished and the arm pressure is increased. Cardiac decompensation, hypertensive headaches and nose bleeds occur. Notching of the ribs usually does not occur until after childhood. X-rays of the chest may demon-

strate the rib notching and cardiac enlargement. Resection and re-anastomosis, with or without a homograft, is indicated to prevent intracranial hemorrhage and progressive cardiac failure.

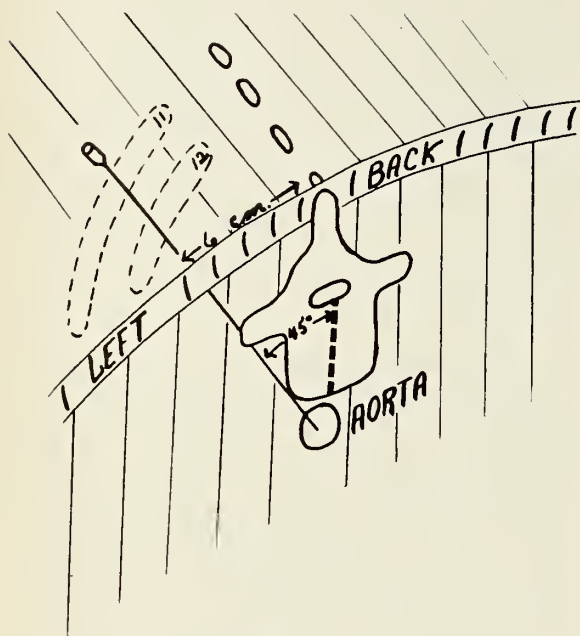


Fig. 1.

Fistulas

Arteriovenous fistulas^{13,14} occur as single or multiple connections between the arteries or veins, and may be congenital or traumatic in origin. In the chronic form, depending on the size of the fistula, there is a fall in diastolic blood pressure, increase in venous pressure, dilatation of the veins, and proximal artery. In the limb, there will be an increase in temperature, stasis, pigmentation and ulceration. Acutely, there may be a distal decrease of temperature due to the shunting of the blood away from the distal capillary beds. The oxygen content of the local veins will be high. An increase of circulating volume will occur. Compensatory enlargement of the heart will occur in large or long standing fistulas, progressing on occasion to myocardial failure. A thrill and bruit continuous throughout the cardiac cycle are present. Compression and closure of the fistula will lead to a decrease in pulse rate and elevation of blood pressure. Arteriography is diagnostic with immediate return of dye toward the heart. Closure will rarely occur spontaneously in a large fistula; death may occur from

cardiac failure. A venesection is to be considered at the time of closure to prevent severe rise in diastolic pressure and acute cardiac failure. Bacterial endarteritis may occur on occasion. The effects of an acute arteriovenous fistula¹⁴ are those of hemorrhage, with a drop of blood pressure, increase of pulse rate, decrease of heart size, increase in venous pressure and increase in cardiac output.

Embolism

*Arterial embolism*¹⁵ is most frequent among individuals with auricular fibrillation. The embolus may follow any arterial path and stop at a site where the arteries bifurcate and narrow, as at the distal end of the popliteal, femoral, aortic or axillary arteries. The embolus is a hard white thrombus distal to which develops a soft red clot. The part distal to the occlusion will become pulseless, cool, then blanched and/or mottled. Effort to move the extremity will demonstrate weakness and pain. It may later become numb if the block is complete. Emergency embolectomy is indicated even though some time has passed when the patient is first seen. Paravertebral sympathetic blocks are useful to increase the collateral but should not be depended upon. Frequently, one femoral pulse is absent; and exploration of that artery produces a questionable flow of blood. In such a case, abdominal exploration will usually show a thrombus at the bifurcation of the aorta lying to one side, allowing blood to enter the opposite iliac vessel. Following surgery, a second embolism may occur requiring repeat surgery. Removal of the left auricular appendage may be indicated to prevent recurrent emboli occurring from this site.

Diagnosis

Aortography^{16,17,18} is important in the diagnosis of the above arterial lesions. Numerous modifications of technique have been used. Briefly our method is as follows (see diagram): With the patient face down on the table, under spinal anesthesia, we insert a No. 17 gauge, 7-inch needle four to five fingerbreadths to the left of the spinus process beneath the twelfth rib, at a 45° angle with the sagittal plane toward the midline. If a transverse process is encountered, the needle must be backed off, angled superiorly or

inferiorly, and reinserted until it meets the vertebral body. It is then moved anteriorly on the vertebral body until it passes in front of the vertebrae. Approximately a 1 cm. thrust will meet resistance, then loss of resistance as it enters the aortic lumen. Normally, a 1 to 2-inch pulsation of blood will appear on removal of the stylet. A rubber catheter connection is attached and a 4 cc. quantity of 70 per cent Urokon is injected for a test picture to check the position of the needle and test the patient for sensitivity. Mild nausea is frequent. If the needle is in the renal artery or superior mesenteric artery, it must be withdrawn and re-inserted, as a full injection of dye into these vessels may well lead to thrombosis and undesirable complications. When the needle has been thus checked, the Bucky film is placed so as to include the tip of the needle and the bifurcation of the iliac vessels on the film. A 20 cc. quantity of 70 per cent Urokon is injected as rapidly as possible, and an exposure is taken as the last 3 cc. is injected. The needle and tubing is filled with physiologic saline until the film is developed. If the arteries are patent to the femoral level, a transaortic femoral arteriogram or what might be called an "aorto-femrogram," may be taken to demonstrate both superficial femoral arteries down to the popliteal level. This is usually accomplished by means of a three-second delay in x-ray exposure after the injection of the dye when no proximal block is present. If the block is found at any point from the aorta distally, a four to eight-second delay of exposure may be necessary before the dye appears in the patent artery distal to the block, if such exists. This radiograph is desirable and can usually be obtained, as a distal patent artery will fill through collaterals. If the distal artery is open, surgery is usually indicated. We have used up to 60 or 80 cc. of Urokon in 20 cc. injections to obtain the necessary information. Direct femoral arteriography is not often indicated in sclerotic vessels, as injury may be sufficient to cause thrombosis. Where necessary, we use a 30 per cent Urokon solution injected through a polyethylene catheter which has been inserted through a large bore No. 16 gauge needle. The needle is then removed, leaving the polyethylene tube in place. If necessary, repeated injections may thus be made without injury to the artery through motion of the needle.

Treatment

The artery bank^{19,20} represents a primary prerequisite for the treatment of the operable arterial lesion. Until recently, it was necessary to obtain homologous arteries for grafting purposes within six hours after death in bodies without systemic infection or disease. Transfer of the body to the operating room and removal of the vessels under sterile conditions was inconvenient and took more time than the pathologist and undertaker were willing to give.

Recently, methods have been devised to sterilize the homologous artery which is removed at the routine postmortem examination. We feel that the most practical artery bank is that developed by LoGrippe and Szilagyi with the use of Beta-propiolactone to facilitate sterilization of the arteries. The routine postmortem examination permits have been changed so that special permission and a signature may be obtained for the removal of arteries to be used as homologous grafts. Permits are requested on all bodies up to sixty years of age and on all malignant and septicemic diseases except those which are viral in type. Vessels then may be removed at the time of autopsy at the discretion of the pathologist, depending solely on their quality. They are taken from refrigerated bodies up to twenty-four hours after death. The aorta from above the renals is removed, including the bifurcation, and both ilial and femoral vessels down to the popliteal level. Polyethylene tubing is best left in the internal iliac, profundus and popliteal vessels to facilitate embalming, and encourage co-operation from the undertaker. The vessels are then cleaned by the surgical resident on pathology and placed in saline solution for transfer to the artery bank; where, within three to four hours, they are sterilized with Beta-propiolactone. The method is relatively simple and requires little more than the refrigerator for storage, laboratory glassware, and a controlled temperature water bath, or incubator. Following sterilization, the Vessels are stored at 4° C. in Hanks solution with penicillin and streptomycin added. The aortic bifurcation, right femoral, and left femoral segments are each stored separately, so that each donor may easily be used for as many as three or more arterial grafts. The homografts are usable up to thirty or forty days, after which they may be lyophilized for further storage. We have taken vessels from

sixty-two such bodies and have found them in every case to be sterile, with all qualities remaining necessary for a good homologous graft.

Summary

With the development of a practical method for the preservation of the homologous artery, diagnosis of the operative arterial lesion has become important. The clinical history will usually indicate the presence of probable arterial disease, but x-ray with arteriography is of greatest value in the exact location and definition of the lesion. Surgery of a curative nature can then be planned and accomplished.

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CEREBRAL ANGIOGRAPHY

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Detecting Glycosuria

Comparison of Three Preparations for the Detection of Sugar in the Urine

By Joseph D. Mann, M.D.
Grand Rapids, Michigan

TWO COMMERCIAL preparations designed to detect glucose in the urine have been introduced recently. The only available information regarding these preparations comes from the sponsoring companies. Both new methods employ paper strips impregnated with glucose oxidase and an appropriate indicator system. Specificity, sensitivity and simplicity are claimed by the manufacturers. We have compared the performance of these preparations with each other and with a more familiar commercial method which is essentially the Benedict reaction.

Methods

Urine specimens obtained from hospitalized patients were studied by three methods—"Enzyme A"*, "Enzyme B"*** and a "Reduction Method"†. Some specimens were obtained from diabetic patients, others were secured following intravenous infusion of glucose and fructose, or during the course of glucose tolerance tests. A small percentage were derived from cases of renal glycosuria or lactosuria. Fermentation studies were carried out and the patient's clinical records were reviewed when necessary to establish the cause of the glycosuria. One or more test was positive in 506 specimens. Blood sugar findings, when available, were correlated with the urine findings. Tests were performed by several different technicians according to the manufacturer's specifications.

Results

In the majority of instances all three tests were positive. "Enzyme B" was the only positive test in 15 per cent of the specimens (Table I). In every such case the degree of positivity was 1+. All such specimens tested showed a positive fermentation reaction. They were largely obtained

during the course of glucose tolerance tests or after intravenous administration of glucose. The "Reduction Method" was the only positive test in 10.7 per cent of the specimens. Most of these

TABLE I. PERCENTAGE OF POSITIVE TESTS FOR URINARY SUGAR OBTAINED WITH THREE COMMERCIAL PREPARATIONS OF 506 URINE SPECIMENS

Reduction	Method		Per Cent of Tests
	Enzyme A	Enzyme B	
+	+	+	60.6
++*	0	0	10.7
0	+	0	0.0
0	0	+	15.0
+	+	0	0.0
+	0	+	3.8
0	+	+	9.9
Total			100.0

*Not fermentable or specimen obtained after intravenous administration of fructose.

specimens either did not show a positive fermentation reaction or were derived from patients who had received intravenous fructose. In no instance was "Enzyme A" the only test positive; in no case was the "Enzyme A" test positive and "Enzyme B" test negative. However, the "Reduction Method" and the "Enzyme B" methods were both positive while the "Enzyme A" method was negative in 3.8 per cent of specimens.

The manufacturers of "Enzyme A" do not claim that the color reaction of their preparation can be quantitated.†† On the other hand, the manufacturers of "Enzyme B" supply a color chart designed to permit semiquantitative reporting of the test. Comparison of the degree of positivity reported by the "Enzyme B" method and the "Reduction Method" reveals a rough correlation between the two techniques (Table II). The "Enzyme B" test is somewhat more sensitive and the units of positivity do not correspond exactly between the two techniques.

From the Department of Pathology, Butterworth Hospital, Grand Rapids, Michigan.
* "Clinistix" (Ames Company, Elkhart, Indiana).
** "Testape" (Eli Lilly & Company, Indianapolis, Indiana).
† "Clinitest" (Ames Company, Elkhart, Indiana).

†† Personal Communication, Ames Company, Elkhart, Indiana.

TABLE II. COMPARISON OF THE DEGREE OF POSITIVITY REPORTED IN 506 POSITIVE URINE SPECIMENS BY THE "REDUCTION METHOD" AND BY "ENZYME B" METHOD

Reduction		Enzyme B				
Degree of positivity†		0	1+	2+	3+	4+
	Corresponding Per Cent Sugar	0	0.1	0.25	0.5	2.0
0		—	127	3	—	—
trace	0.25	48*	61	23	5	—
1+	0.50	6*	10	26	14	—
2+	0.75	—	—	12	26	8
3+	1.00	—	—	—	12	41
4+	2.00	—	—	—	2	82

†According to manufacturer's specifications.

*Not fermentable or specimen obtained after intravenous fructose.

Comments

In this series, "Enzyme B" appeared to be more sensitive than "Enzyme A." The "Reduction Method" compared surprisingly well in sensitivity to the "Enzyme A" test. Both enzymatic methods appear to be specific for glucose. The Benedict reaction has the doubtful advantage of detecting nonglucose reducing substances.

The semiquantitative color chart supplied by

the manufacturers of "Enzyme B" introduces a problem to the clinical laboratory and to the clinician. According to the manufacturer's specifications and in the actual practice (Table II), the degrees of positivity obtained by the "Enzyme B" method are different from the familiar system obtained with the Benedict reaction. The clinician must revise his thinking if the new standards are employed. The clinical laboratory must clearly indicate which method is being used and what the degrees of positivity mean.

For the present, we propose to retain the Benedict positivity scale with which the clinician is familiar and use also the enzyme test to obtain additional sensitivity and specificity. Specimens which are positive by the enzyme test and negative by the reduction test will be reported as "faint trace." Use of the enzyme test will reduce the need for fermentation tests in the identification of sugars in the urine.

Acknowledgment

The technical assistance of Mrs. Miriam DeLange and co-workers is gratefully acknowledged.

INTERATRIAL SEPTAL DEFECT

(Continued from Page 60)

normal. Eight months following operation the patient is well with normal examination and function.

Comment: This is an example of an ideal candidate for this procedure.

Summary

Interatrial septal defect is a frequent congenital abnormality of the heart. It usually causes death in the fourth decade due to progressive changes resulting from the left to right shunting of blood in the atria. It is surgically correctable, often by closed procedures. Childhood is the safest and most effective time for the surgical correction. The physiology of the defect is discussed. Three cases are presented to illustrate results of surgical treatment in the various stages of this anomaly.

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I Challenge You

To assure the provision of medical care security, in a form acceptable to both the public and the medical profession, an awareness of existing approaches, what is being planned, and a constant re-evaluation, must be maintained.

The time for complacency on the part of our profession is over. We have reached a crossroads where default in leadership becomes final. Ostrich-like satisfaction with an undisturbed status quo can become an enmeshing quicksand.

On the other hand, if we are sincerely to assume our rightful and traditional responsibility for determining how our patients shall receive medical care, we must ascertain what is desired and needed in the way of medical care security.

Already schemes for such security are in existence, or being planned, by lay persons and organizations. This is being done without prior consultation with the profession and without regard for our plans.

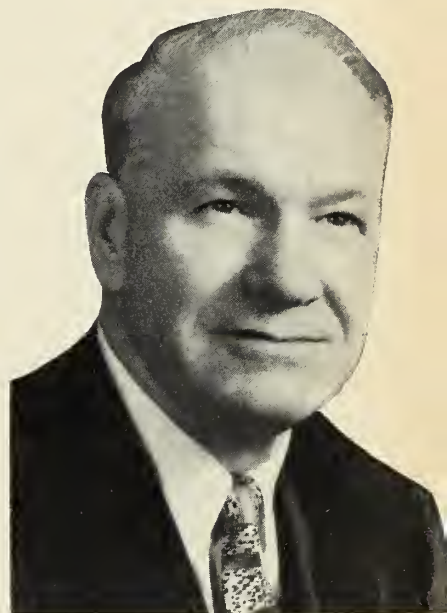
If we were to concede the propriety of non-professional groups concerning themselves with medical security, we still would not accept their usurpation of responsibilities which are solely ours.

A basic difference in viewpoint exists between these groups and our profession. Their programs at best can only be financing and administrative mechanisms. They cannot supply a means of furnishing service because medical care can be provided only by physicians. It is difficult to see how so personal a relationship as that of physician and patient can be equated with the measured cadence of efficiency-ruled automation. Yet that is the essence of what is being advocated by some lay groups. They reject free choice service in favor of totally group practice. They propose salaried physicians or a capitation fee and, in doing so, give a newly-tailored definition of "free choice" to fit the circumstances.

Most members of MSMS are at least vaguely aware that some of their fellow physicians maintain close contact with this vital and absorbing subject of prepayment medical care. Credit is overdue to MSMS officers, Councilors, and members of the Michigan Medical Service Board, for their unremitting attention to this subject. But it is not enough that so small a percentage of our members are conversant with this tremendous problem. It is of utmost importance that *all* members become familiar with it.

I challenge you, as a member of MSMS, to avail yourself of the plentiful material on the economics of medicine. If the profession is to withstand powerful onslaughts and unwarranted usurpation upon our ideals and principles of professional practice, we must have a united front. Only by an informed membership, only by you knowing what is going on, can the necessary evaluation of medical care plans meet the needs of the times.

President's



Message

Rich Walls M.D.

President, Michigan State Medical Society

Editorial

CONGRESS AND MEDICAL LEGISLATION

The Congress for 1957 will be considering a host of new bills having a direct or remote interest to the medical profession. This would be a wonderful time for the doctors to sponsor a few basic actions which would make the going easier, would immediately benefit our public, and would serve to annul the traditional role in which we have been so frequently cast for the past three decades.

The profession has made most of its imprint on the Congress by opposition to certain bills. It started during the thirties when we had the perennial Wagner, Murray, Dingell bills. That fight was long and bitter but placed us always "in opposition." The late Senator Taft offered his version of a medical program after consulting with the late Senator Vandenburg and many of the doctors. We were asked to make suggestions, and for a long time it seemed the profession could be known by what it advocated.

It is late this year, but a program of beneficial bills could be started any time and would be a stroke of good business. Several bills of general importance could well be promoted.

JENKINS-KEOGH

Another Jenkins-Keogh bill is almost certain to be introduced in the next session of Congress. It would benefit almost all self-employed persons. The last session of Congress came near passing one—failing because someone was not on the job at a critical moment to include it in an emergency act which was cleaning up many loose ends. Under various names, these Jenkins-Keogh bills have been under consideration for many years. The advocates of this legislation are asking only for an equal chance in the income tax field, with six times their numbers who are employed in industry.

The American Bar Association and the American Medical Association have been advocating such legislation as the Jenkins-Keogh bill since about 1950 and will undoubtedly continue.

Every industry may favor its salaried or wage-earning people by depositing for them, in addition

to their wages, a set sum (and it can be large) to buy or provide retirement annuities. Thus much larger incomes are available beyond the income tax restrictions. The employee pays his income tax (it is withheld), and that tax is only on the basic rate. The annuity money is not his until years later, and industry may charge this amount off as expense just the same as though it had been used to increase the wage. There are two benefits to industry, and good laborers are kept employed because of established benefits which would automatically be cancelled if a change of employer occurred.

Income taxes in our modern time have become so high it is almost impossible for a person after paying his tax to accumulate enough to establish income bearing holdings. The tax rate starts at twenty per cent, and increases with every step until a maximum of 92 per cent (which is confiscatory) is soon reached. Many of our self-employed are professional—doctors, dentists, architects, lawyers, musicians, preachers, and small business operators. Their earning power is slow to develop but lasts for relatively few years, not long enough for them, with the meager amount left after taxes and living expenses, to purchase enough endowments so their after retirement income even with the added social security, can provide even the most modest living.

Our friends in industry who apparently have been earning about the same or even less than we, have been provided for out of so-called "expense of doing business money," and without tax. That cost has not helped government and has increased the cost of doing business. We, the self-employed, have not benefited but have helped pay.

Our many friends in industry have been able through their employers' wise tax-free investments, to build a substantial retirement annuity which the self-employed individual should, but is not able, to do.

THE JOURNAL has commented on this subject at least once a year since September, 1948. The self-employed are asking no special privilege—simply to be placed on the same benefit level as their friends in industry.

HEALTH REINSURANCE

The President, in his messages on the state of the nation, for several years has advocated what was called "reinsurance." He was interested in arrangements by which the voluntary medical and hospital prepayment plans could provide needed health insurance to persons in the lower income levels, who were prevented from buying the same health benefits so many millions of our people have been doing in ever-increasing amounts. This proposal was called "reinsurance" and consisted of advancement by the government of at first \$50,000,000, and contributions by each subscriber plan of suggested amounts to the common fund operated by the Department of Health, Education and Welfare. If service experience provided a deficit after caring for these persons, the amount would be forthcoming from the common funds. It was stipulated that contributions of the subscribers be so arranged periodically that the total amount would pay off all amounts advanced, and the government would have its \$50,000,000 back at the end of five years.

This amounts to a subsidy pure and simple, instead of reinsurance, but demands the subsidy back at the end of five years. Actually, under the plan the subscribers, Health Insurance Voluntary groups, were being asked to take non-eligible subscribers and pay the losses ultimately themselves. The only out would be to go through the form of a subsidy by HEW, but actually to secure the money in some method from the ordinary subscribers.

Assistant Secretary Roswell Perkins, author of the administration's reinsurance program, is leaving the department. We probably shall not hear much about reinsurance this session—we hope.

MEDICAL EDUCATION

The costs of medical education have not in any way decreased. It was estimated a few years ago that another \$10,000,000 is needed every year by the medical schools in addition to the amounts now available from tuition and state supports, private endowment and other sources. The Federal government has offered to make funds available. The American Medical Association has not objected to one-time provision of funds for construction, but has been apprehensive of anything in the nature of a subsidy, fearing loss of administrative control by the medical schools.

Bills will undoubtedly be introduced which must be studied for hidden intent. We fear what might occur in the future if subsidy has encroached on our most cherished right.

Medical research will naturally come under medical education and the amounts to be provided are multiplying each year. For the current fiscal year ending July, 1957, the amount of about \$225,000,000 has been appropriated.

MEDICAL DRAFT

The special draft law for doctors of medicine and dentists is due to expire July 1, 1957. In the past, it has been extended by simple act of Congress when a need seemed apparent and the quota of medical corps officers was difficult to obtain from the newly graduated; also experienced officers were in demand. The general draft for all persons expires at age thirty-six, or maybe now twenty-six, but for doctors it starts when they graduate and extends until they are fifty-one. No other category of persons is subject to such special and exacting control. In justice, the law should be repealed and should not be reenacted. It is purely class legislation. Some other method should be used. Many of our doctors were sent to school by the government and were required to promise only a short term of duty. In justice, a sufficiently long enlistment is indicated to reimburse the government for free education.

GOVERNMENT EMPLOYEES' INSURANCE

For several years, Congress has been considering some action to provide health insurance for its civilian employees but has never seemed to find the solution. Many bills have been introduced, but always some snag developed or the impelling interest has faded. The last Congress might have succeeded but stumbled on the problem of payroll deduction. Congress asked a study to be made under the supervision of the General Accounting Office to determine the added cost and feasibility of such a service.

Congress is suddenly apprehensive of the added expense of making payroll deductions in its own offices to pay for health insurance, but never hesitated when it appointed every employer of labor to be its collecting agent in the income tax withholding burden. Michigan Medical Service and the Blue Cross might have been serving the postoffice employees in Michigan for many years,

if some way could have been arranged for payroll deduction. The department refused, saying such deductions were illegal, but did withhold income tax. We have suggested to different congressmen that a simple act authorizing payroll deductions for certain purposes, such as Community Chests, national welfare movements or health insurance, would put the government agencies in the same relation to their employers as industrial employes.

We anticipate government will provide for some form of voluntary prepayment health insurance of government employes in the coming session of Congress. We believe this to be very proper, but we suggest our representatives in Congress be guided in their efforts so that our medically sponsored plans will be given a chance. The wording and intent of the bill may be of significant importance, also the willingness to do something.

MICHIGAN LEGISLATION

On the home state scene, there are some points of legislative action which we should be known as advocating instead of opposing. It has been shown that Michigan imports 250 graduates in medicine each year because our own medical schools cannot supply the demand. The Wayne State University Medical School now could accept about fifty more students in each class, if money for more teachers were available. Our House of Delegates, in September, 1956, passed a resolution urging the State to accept this obligation. We can heartily support such a bill.

THE YEAR 1956: MEDICARE

The year 1956 has been one of extremely significant accomplishment. The most outstanding is the action of the government in providing medical care for the dependents of military personnel. Such care has been available traditionally, but only at military hospitals where the family was stationed. With business booming as it is, it is becoming increasingly difficult to keep the military strength up to what is required, especially the more experienced and necessary personnel. The draft helps, but does not hold the older men in service.

Another cause of difficulty is the highest percentage of employed persons in history, and unemployment is no problem for the person who wishes a job. Industry is naturally competing

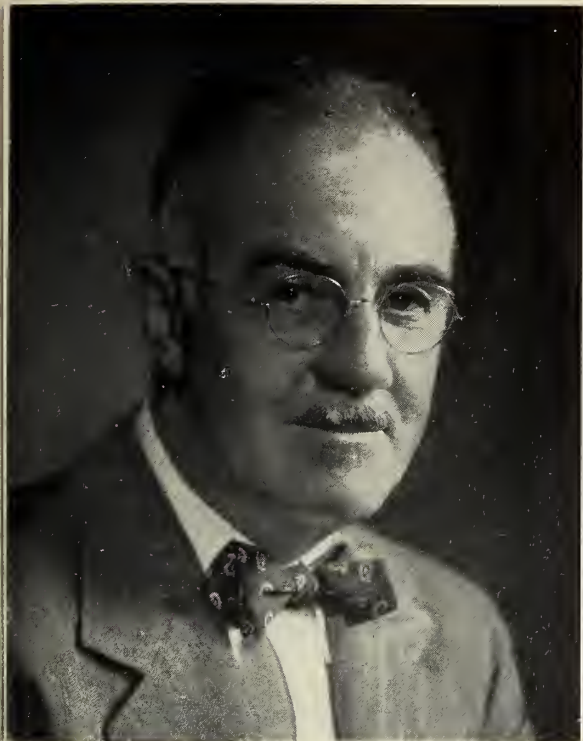
with the armed forces with its higher pay and more prerequisites, especially in health insurance. This year, the government has provided the Medicare program, through which the actual dependents of service men will get care under regulation and considerations, but very liberal ones.

The act went into effect on December 7. Congress provided the machinery and appointed an army task force to make negotiations. Not too much time was available after the adjournment of Congress up to December 7. The American Medical Association, being the representative of the medical profession, appointed a task force to accomplish an almost impossible task in the time limit. Their attorneys and designated officials, after innumerable conferences, arrived at a procedure. A controlling contract form was negotiated, through which the individual state medical societies would contract with the military departments to render care for the dependent of the armed forces personnel.

This contract form wisely provided that each state medical society negotiate fees on its own basis and agree to administer the program itself or designate some organization as representative and intermediary. Late in October, the state medical societies were invited to Washington to sign their contracts. On that trip, the terms of the contract were first learned. Many of the states had designated Blue Shield as their representative; others were to administer their own program.

The contract provides that, regardless of the arrangements, each doctor who serves these dependents is actually in a personal contract, not with the patient but with the United States government. The service must be rendered for the agreed amount, and under no circumstances is a separate or additional bill to be rendered. The states negotiated their fees, as provided. No one knows the extent and amount of medical and hospital, or even nursing care which will be involved in this new adventure in medicare, so the contracts are all on the cost-plus-operation expense basis. The present veteran's home-town care program is on a somewhat similar basis, the General Accounting Office reserving and using the right of visiting our offices and rechecking the expense claims. The government did not raise much objection, its rule being to accept mostly fee schedules as presented, because under the

(Continued on Page 130)



HOWARD B. SPRAGUE, M.D.

Heart Association Program



Featured speaker at the Annual Dinner Meeting of the Michigan Heart Association in the Grand Ballroom of the Sheraton-Cadillac Hotel, Detroit, at 6:30 P.M., Thursday, March 14, 1957, and Moderator of a Panel on "The Heart Patient at Work" during the Thursday morning program of the Michigan Clinical Institute (see below).

SCIENTIFIC SESSIONS ON HEART DISEASES

at the

MICHIGAN CLINICAL INSTITUTE

(Speakers provided by the Michigan Heart Association)

8:30-9:00 A.M.

"Rheumatic Fever"

DONALD E. CASSELS, M.D., Chicago, Illinois
Professor, Department of Pediatrics, University of Chicago

M. S. CHAMBERS, M.D.

*President-Elect,
Michigan Heart Association*

9:00-10:30 A.M.

Panel Discussion on "The Heart Patient at Work"

Moderator:

HOWARD B. SPRAGUE, M.D.
Lecturer on Medicine, Harvard Medical School

MARION JO CZ, M.D.

*Medical Director,
Chrysler Corporation*

Panel Members:

E. A. IRVIN, M.D.
*President, Michigan Heart Association
Medical Director, Ford Motor Company*

GORDON B. MYERS, M.D.

*Professor of Medicine
College of Medicine
Wayne State University*

JOHN G. BIELAWSKI, M.D.

*Medical Director,
Michigan Heart Association*

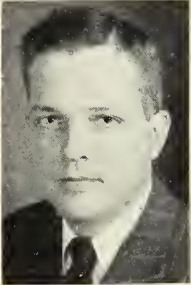
Michigan Clinical Institute

Closed Circuit Color Television Program

Wednesday

March 13, 1957

11:15 A.M. to 12:45 P.M.



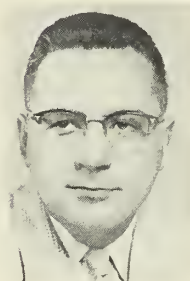
ELMER B. MILLER,
M.D.



NICHOLAS GIMBEL,
M.D.



WILLIAM S. CARPENTER,
M.D.



M. S. DEWEESE,
M.D.



CHARLES G. JOHNSTON,
M.D.



RUSSELL L. MUSTARD,
M.D.



J. W. LOGIE,
M.D.

COLOR TELEVISION PROGRAM, beamed to the Grand Ballroom, Sheraton-Cadillac Hotel through the co-operation of the staff of The Grace Hospital, Detroit and Smith, Kline and French Laboratories of Philadelphia.

OPERATIVE CLINICS

A. Operating Rooms of Grace Hospital

Under supervision of **ELMER B. MILLER, M.D.**, Detroit, Associate Attending Surgeon at Grace Hospital and Instructor in Surgery, Wayne State University

1. "Cholecystectomy and Bile Duct Exploration"

NICHOLAS GIMBEL, M.D., Detroit
Associate Professor of Surgery, Wayne State University, College of Medicine

2. "Gastric Resection"

WILLIAM S. CARPENTER, M.D., Detroit
Harper and Mt. Carmel Hospitals and Instructor in Surgery at Wayne State University

B. Grand Ballroom, Sheraton-Cadillac Hotel

1. Surgical Commentator and Moderator

MARION S. DEWEESE, M.D., Ann Arbor
Associate Professor of Surgery, University of Michigan; Chief of Surgical Services, Ann Arbor Veterans Administration Hospital

2. Panel of Discussants

CHARLES G. JOHNSTON, M.D., Detroit
Professor of Surgery, Wayne State University College of Medicine

RUSSELL L. MUSTARD, M.D., Battle Creek
Past Chief of Surgery, Leila Post Montgomery Hospital; Consultant to Percy Jones Hospital and Lecturer in Surgery, University of Michigan

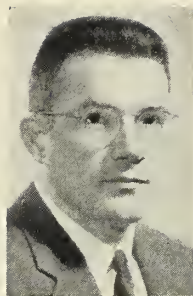
JAMES W. LOGIE, M.D., Grand Rapids
Consultant to St. Mary's and Blodgett Hospitals; Counselor, Michigan Chapter, American College of Surgeons

Thursday
March 14, 1957

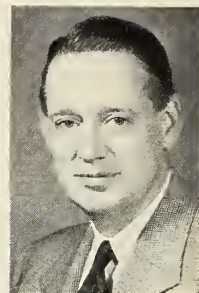
11:15 A.M. to 12:45 P.M.

11:15 "Management of Hypertension"

FLOYD B. LEVAGOOD, M.D., Detroit
Associate Attending Physician, Grace Hospital; In-
structor in Medicine, Wayne State University



WILLIAM O. MADDOCK,
M.D.



F. B. LEVAGOOD, M.D.

11:45 Clinic on "Endocrine Diseases"

WILLIAM O. MADDOCK, M.D., Detroit
Associate Professor of Medicine, Wayne State Uni-
versity College of Medicine

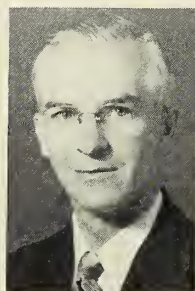
ROBERT LEACH, M.D., Detroit
Assistant Professor of Medicine, Wayne State Uni-
versity College of Medicine



ROBERT LEACH, M.D.

12:15 Clinic on "Collagen Diseases"

ALFRED JAY BOLLET, M.D., Detroit
Assistant Professor of Medicine, Wayne State Uni-
versity College of Medicine



G. S. FISHER, M.D.

Friday

March 15, 1957

11:15 A.M. to 12:45 P.M.

11:15 "Uterine Bleeding"

GEORGE S. FISHER, M.D., Detroit
E. S. HOFFMAN, M.D., Detroit



JAMES B. BLODGETT,
M.D.



E. S. HOFFMAN, M.D.

11:45 "Diagnosis and Management of Acute Arterial Ob-
struction"

JAMES B. BLODGETT, M.D., Detroit
Associate Attending Surgeon, Grace Hospital



GORDON B. MYERS,
M.D.

12:15 "Examination of the Patient with Acute Abdominal
Pain"

GORDON B. MYERS, M.D., Detroit
Professor of Medicine, Wayne State University Col-
lege of Medicine

Michigan's Department of Health

Albert E. Heustis, M.D., Commissioner

MAJOR ISSUES IN PUBLIC HEALTH

Among the major issues in public health in Michigan today that will be reflected in budget requests made to the Legislature by the Michigan Department of Health are polio immunization, prevention of relapse in mental illness and air pollution control.

Polio Immunization

Michigan youngsters one through fourteen are now a well-immunized group. This year, immunization is being provided for children reaching one year and booster doses for all in the one through fourteen age range. But next year there will be approximately 200,000 more children reaching one year and unless vaccinations continue to be given widely, the immunized group will be diluted by 200,000 unvaccinated children each year.

There are three possible approaches in considering polio immunization:

1. A strong, positive program of all-out public participation might be developed to increase most rapidly the number of people protected from paralytic polio.

2. The entire responsibility for immunization might be placed on individuals and their own physicians. This would make polio the only communicable disease handled in this way. By Michigan law, the State Health Commissioner and local health officers are responsible for assuring that protection is offered for all children of the state against smallpox, diphtheria, whooping cough, tetanus and, in certain situations, typhoid fever. Polio vaccine was, of course, not available when these acts were written, but there is very specific emphasis on the state's interest in the wise use of the then known vaccines for the protection of all children.

3. The program might be planned in terms of the legally defined responsibilities of the State Health Commissioner in matters involving a communicable disease. Under such a program, opportunity for poliomyelitis vaccination would be provided for the youngsters born each year, and for those children under 15 who move into Michigan, developing over the years, a population protected from paralytic polio.

Prevention of Relapse in Mental Illness

Over the years, local health department personnel, particularly nurses, have aided families in meeting problems in emotional and mental health as well as in physical health. A number of basic health department programs, such as child health conferences, have definite preventive mental health implications.

An expansion in this field is recommended on a trial basis to determine whether home visits and family consultation by the public health nurse can help to cut down the high rate of relapse in patients released from the mental hospitals.

In fiscal 1955, a total of 4,305 patients were released from Michigan mental hospitals on a convalescent

placement basis. Of these, 1,457 later had to re-enter the hospital for further treatment.

In the recommended trial program which would be carried on in co-operation with the Michigan Department of Mental Health, six local health departments would be provided with an additional public health nurse. The nurse would be given certain basic training and would work not only under supervision of the local health officer but also under standing orders of the mental hospital medical staff. Each nurse would, in turn, provide training for other public health nurses on the local health department staff in working with mentally ill patients and their families.

Air Pollution Control

As a part of its occupational health program, the Michigan Department of Health has worked with industries to protect their employes from contaminated air within the factories. Today, the state is faced with a different and growing aspect of the same problem, community air pollution resulting from industrial dusts and fumes.

Industrial expansion, relocation of industries and adoption of new processing techniques, together with the public's insistent demand for cleaner air all point to the need for a well planned and carefully executed air pollution control program. Since several counties, or cities and counties, may have an air pollution problem stemming from a single industrial source, state regulations are needed to supplement local ordinances in bringing about effective control.

It is recommended that legislative action be taken to officially place community air pollution control under jurisdiction of the Michigan Department of Health.

Health Officer Positions Open

A number of desirable openings in Michigan for directors of local health departments are on file with the Section of Local Health Services of the State Health Department. Physicians interested are invited to write to the Section for information.

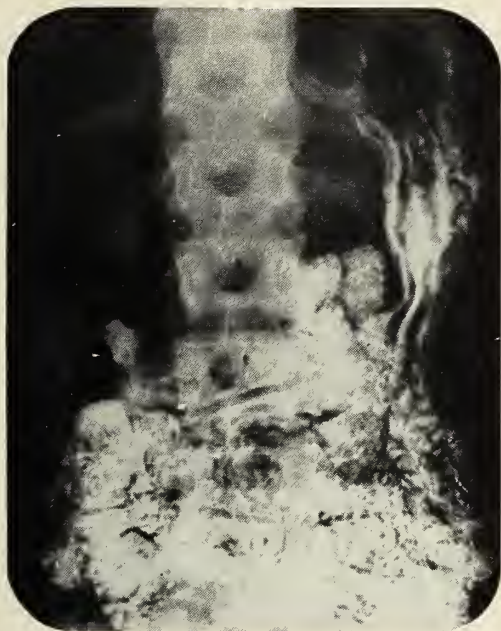
Externship Program for 1957

During the summer vacation period of 1957 the Michigan Department of Health will again sponsor an externship training program that will give to six selected sophomore or junior medical students ten weeks of work experience in local health departments.

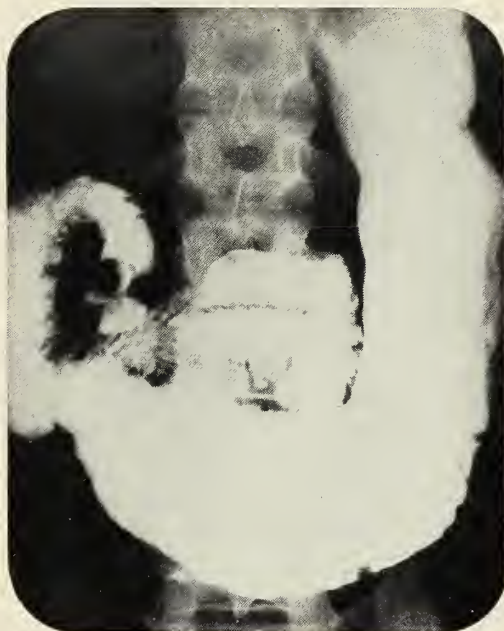
The objectives of the program are to provide interested students with an opportunity to observe and participate in an official public health program and, at the same time, to furnish personnel for carrying out useful projects. Health departments have already been invited to submit to the State Health Department projects suitable for the ten-weeks program. The local agency is responsible for travel expenses of the externs and the State Health Department pays salaries. Selection of students is made in co-operation with the deans of Michigan's medical schools.

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Improves Visualization



*Posterior-anterior film: definite hyperperistalsis with poor duodenal visualization.**



Posterior-anterior film after 15 mg. of Pro-Banthine intramuscularly: chronic duodenal ulceration clearly disclosed.

The same anticholinergic action which has made Pro-Banthine (brand of propantheline bromide) the outstanding therapeutic agent in peptic ulcer has also proved valuable in diagnosis.

By controlling the hypermotility, Pro-Banthine may permit delineation of a lesion otherwise not clearly visualized.

The technic is simple: If the first set of films shows hypermotility but no filling defect is demonstrable, reexamination is

done a few minutes after intramuscular injection of 15 mg. or a half hour after oral administration of 30 mg. of Pro-Banthine.

This procedure has the additional advantage of demonstrating the patient's response to a given dosage of the drug.

G. D. Searle & Co., Chicago 80, Illinois, Research in the Service of Medicine.

*Roentgenograms courtesy of I. Richard Schwartz, M.D., Kings County Gastrointestinal Clinic, Brooklyn, N. Y.

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In Memoriam

Paul W. Butterfield, M.D., died Friday, October 12, 1956, at the age of forty-seven. He was stricken with a cerebral hemorrhage in Chicago where he had gone to attend annual meetings of the College of American Pathologists, of which he was a fellow, and the American Society of Clinical Pathologists.

Born April 23, 1909, Dr. Butterfield attended Bowdoin College at Brunswick, Maine, and Boston University Medical School. He interned in 1934-35 at Salem Hospital (Massachusetts) and was a resident pathologist in 1935-36 at Huntington Memorial Hospital in Boston and at Massachusetts Memorial Hospital.

He went to Alpena with his family to take the post of Alpena Hospital pathologist in 1953.

Dr. Butterfield was a member of the Tri-County Medical Society, Alpha Kappa Kappa medical fraternity, the Michigan State Medical Society, the College of American Pathologists, the American Society of Clinical Pathologists, the AMA, the Michigan State Pathological Society, and the Michigan State Blood Bank. He was a Rotarian and a member of Hopper Lodge No. 386, F and AM.

Surviving are Mrs. Butterfield and two sons, Paul, nine and Stuart, seven.

William A. Evans, Jr., M.D., Chief of Staff of Children's Hospital of Michigan and chief radiologist there for years, died at his home in Detroit, October 17, 1956, at the age of forty-nine.

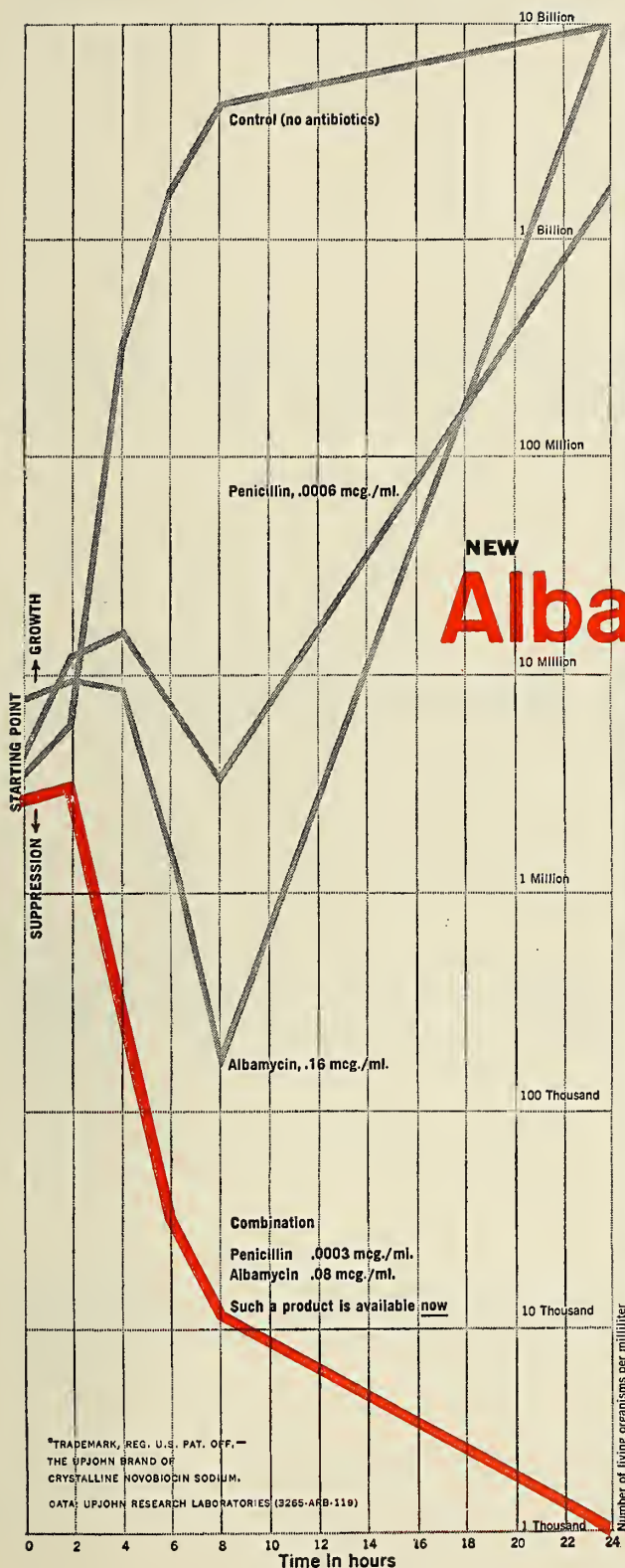
Dr. Evans was widely known for his scientific work through the numerous articles he wrote covering various phases of roentgenology.

Dr. Evans was an active member of the Wayne County Medical Society from 1937 until his death. He was a Fellow of the American College of Radiology and American Roentgen Ray Society and a member of Nu Sigma Nu medical fraternity.

Born in Bellaire, Michigan, January 14, 1907, Dr. Evans resided in Detroit for forty-five years and practiced his specialty there for more than twenty years. Following graduation from Williams College in 1926, he studied medicine at Johns Hopkins Medical School, from which institution he obtained his M.D. degree in 1930.

Following his internship at Peter Bent Brigham Hospital, Boston, Dr. Evans did postgraduate work at the University of Wurzburg. He returned to Boston to serve two years as assistant instructor in medicine at Harvard University Medical School. He then came to Detroit to enter private practice as a roentgenologist.

His wife, Charlotte, a daughter, Elizabeth, and his mother, Mrs. William A. Evans, Sr., survive.



average dosage only t.i.d.

antibiotic synergism

The three gray lines of this graph show the growth rate of a penicillin-sensitive strain of *Staphylococcus* (*Micrococcus pyogenes*, var. *aureus*) under 3 conditions:

1. In the absence of antibiotics
2. In the presence of subinhibitory concentration of penicillin
3. In the presence of subinhibitory concentration of Albamycin*

Even half these subinhibitory concentrations of penicillin and Albamycin, when combined, (black line) produce a dramatic bactericidal effect.

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Risk of resistance: Because in vitro tests show this combination is synergistic against even *Staphylococci* already resistant to all other antibiotics, the risk of resistance is minimized.

Risk of enterocolitis: Because it has little or no effect on the predominant Gram-negative intestinal bacteria, and is highly effective against *Staphylococci*, there is virtually no danger of enterocolitis due to alteration in intestinal flora, or of other side effects such as perianal pruritus.

Convenience: Alba-Penicillin is oral therapy, and the average adult dosage is only 1 to 2 capsules t.i.d., which eliminates middle-of-the-night medication.

It is available in bottles of 16 capsules. Each capsule contains 250 mg. Albamycin (as novobiocin sodium, crystalline) and 250,000 units penicillin G potassium.

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NEWS MEDICAL

Lewis Cohen, M.D., Detroit, is the author of "Electro-vasography—For the Rehabilitation of Patients with Peripheral Arterial Disease," published in the *Bulletin of Sinai Hospital*, Detroit, June, 1956.

* * *

Plinn F. Morse Honored.—In recognition of more than forty years of devoted service to Harper Hospital, his stimulating leadership and wise counsel, the editors of *Harper Hospital Bulletin* have published a special number for September and October, honoring Plinn F. Morse, M.D.

The papers in this collection "represent the esteem of some of his many friends and associates and were born from studies inspired by a teacher . . . who gave his heart 'to seek and search out by wisdom concerning all things that are done under heaven.'"

There are some thirty papers in this special number. Contributors include: James Milton Robb, M.D., Lawrence Reynolds, M.D., Carl V. Weller, M.D., W. L. Brosius, M.D., L. W. Gardner, M.D., Viola G. Brekke, M.D., E. M. Knights, M.D., M. Hutchins, Sc.B., C.R.F. di Profio, M.D., G. T. Bradley, M.D., J. E. Croushore, M.D., W. H. Gordon, M.D., L. E. Holly II, M.D., D. J. Sandweiss, M.D., H. I. Kallet, M.D., B. R. Lutes, M.D., T. Leucutia, M.D., B. C. Lockwood, M.D., H. C. Mack, M.D., F. C. Schreiber, M.D., A. Nielsen, M.D., P. J. Huber, M.D., W. D. Mayer, M.D., M. R. Beitman, M.D., Richard M. McKean, M.D., S. G. Meyers, M.D., Rachel B. Keith, M.D., R. C. Moehlig, M.D., E. A. Osius, M.D., G. C. Penberthy, M.D., C. D. Benson, M.D., C. R. Reiners, M.D., A. Hazen Price, M.D., W. S. Reveno, M.D., H. Rosenbaum, M.D., H. C. Saltzstein, M.D., L. F. Segar, M.D., George Sewell, M.D., R. S. Siddall, M.D., L. D. Stern, M.D., and G. C. Thosteson, M.D.

* * *

The **Seventh International Cancer Congress** will meet in London, England, in July, 1958. It is sponsored by the International Union Against Cancer. The Congress will be held under the presidency of Sir Stanford Cade, and the headquarters will be the Royal Festival Hall.

There will be two main sessions of the Congress: Experimental and Clinical and Cancer Control. Special emphasis will be placed on Hormones and Cancer, Chemotherapy, Carcinogenesis and Cancer of the Lung.

Proffered papers will be considered only if submitted with an accompanying abstract (not over 200 words) before October, 1957, and must deal with new and unpublished work.

Registration forms and a preliminary program will be available early in 1957 on application to The Secretary General, Seventh International Cancer Congress, 45 Lincoln's Inn Fields, London, W.C.2, England.

* * *

Schering Award Winners.—Two senior medical students and one sophomore have won top places—and a total of \$1,500 in cash prizes—in the 1956 Schering Award Contest. A panel of judges who are medical authorities in their respective fields have selected the students as first prize winners in this year's contest, open to all medical students in the United States and Canada.

* * *

Plan Now for Istanbul.—It's none too soon to make your plans to attend the 11th General Assembly of the World Medical Association—one of the most tangible privileges of your U.S. Committee membership. The forthcoming Assembly will be held in the world's "oldest and newest" city, Istanbul, Turkey, where Europe and Asia meet. The dates for the meeting are September 29 to October 5, 1957. Full information regarding travel arrangements, hotel reservations, and projected special tours, may be obtained by writing Louis H. Bauer, M.D., Secretary-Treasurer, The World Medical Association, 10 Columbus Circle, New York 19, N. Y.

* * *

A \$1,000 contribution to aid Hungarian refugees in Austria was cabled November 18, 1956, by the International College of Surgeons following the receipt of an appealing letter from its Austrian chapter, with offices in Vienna. The letter referred to a "state of turmoil difficult to describe" and a "situation heart-rending beyond description." The letter was from M. Arthur Kline, M.D., physician to the American Embassy in Vienna and Secretary of the American Medical Society in Vienna.

* * *

Research in Blood.—An important award of \$17,000 has been given to a Wayne State University Medical School professor by the Commonwealth Fund of New York for his work in blood clotting diseases.

Walter H. Seegers, Ph.D., chairman of the department of physiology and pharmacology since 1948, received a special creative scholarship award.

Significance of this honor was noted by Dean Gordon H. Scott of Wayne's College of Medicine:

"This award is newly created and designed by Commonwealth to allow scientists freedom from teaching and administrative duties to spend at least a year for uninterrupted research, study and lecturing.

(Continued on Page 104)

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DOSAGE: 1 to 3 tablets daily as required.

SUPPLIED: As orange tablets, in bottles of 100 and 1000. Also available—

CUMERTILIN Sodium Injection, 1- and 2-cc. ampuls, in boxes of 12, 25, and 100; and 10-cc. vials, individually and in boxes of 10 and 100.

1. Pollock, B. E., and Pruitt, F. W.: *Am. J. M. Sc.*, 226:172, 1953.

THE G. A. INGRAM COMPANY

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(Continued from Page 102)

"To be picked one of the first recipients from a nationwide group of recognized scientists is a high honor for Dr. Seegers and Wayne's College of Medicine."

Dr. Seegers has spent twenty years tracing the mysteries of the clotting factors of blood. Late in the 1930's Dr. Seegers and his associates purified thrombin, a blood derivative—important to clotting. This was the first time any blood-clotting substance had been available for scientists to study in purified form. Blood clots in a few seconds when mixed with this powerful clotting agent.

Recently, Dr. Seegers and his associates have discovered derivatives of prothrombin. His blood research laboratory—one of the best equipped in the world—is in the process of describing the properties of these derivatives and obtaining purified products from platelets.

* * *

American Board of Obstetrics and Gynecology.—

The next scheduled examinations (Part I), written, for all candidates will be held in various cities of the United States, Canada, and military centers outside the Continental United States, on Friday, February 1, 1957, at 2:00 P.M.

Candidates must submit case reports to the office of the Secretary within thirty days of being notified of their eligibility to Part I. Cases must be prepared in the manner described in the Bulletin of the Board and submitted with a duplicate index list.

Requests for re-examination in Part II must be received prior to February 1, 1957.

Current Bulletins outlining present requirements may be obtained by writing to: Robert L. Faulkner, M.D., Secretary, 2105 Adelbert Road, Cleveland 6, Ohio.

* * *

The Bankers Life and Casualty Company, owners of White Cross, have lost a suit of four years' standing, in which they attempted to enjoin certain groups from selling White Cross policies in Florida and Georgia. The judge claimed they had not shown a conspiracy. Bankers Life was assessed all costs.

* * *

American Academy of General Practice.—It is estimated that more than 5,000 members will attend the next session of the American Academy of General Practice in St. Louis, Missouri, March 25-28, 1957.

During the four-day scientific meeting, the doctors will hear outstanding speakers discuss important subjects including infertility, polio vaccination, and the "neglected" pediatric areas, the eyes, ears, and feet. They will visit sixty scientific and 260 technical exhibits.

The Academy's policy-making Congress of Delegates will convene at 2 p.m., Saturday, March 23. All sessions of the Congress and many social functions will be held in the Sheraton-Jefferson hotel.

Wednesday evening, March 27, following induction ceremonies for Academy President-elect Malcolm E. Phelps, El Reno, Oklahoma, more than 3,000 guests will attend a President's reception and dance honoring J. S. DeTar, M.D., Milan, Michigan, president of the Academy.

(Continued on Page 106)

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new sulfonamide formula for urinary tract infections

UNEXCELLED SOLUBILITY

optimal concentrations at site of infection; avoids crystalluria

BROAD ANTIBACTERIAL RANGE

active against wide range of urinary pathogens, including staphylococci, gonococci, *Escherichia coli*

QUICK SYMPTOMATIC RELIEF

hyoscyamus component quickly relieves pain and burning

FREEDOM FROM TOXIC EFFECTS

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Each tablet or 5-cc. tsp. provides 250 mg. sulfamethylthiadiazole, 250 mg. sulfacetamide, and equiv. of 0.015 mg. alkaloids of *Hyoscyamus niger*.

DOSAGE: Adults—2 tablets or 2 tsp. q.i.d. first 2 days, thereafter, 1 tablet or 1 tsp. q.i.d.

Children—1 cc. (16 drops) syrup per 10 lb. body weight first 2 days, thereafter, 0.5 cc. (8 drops) per 10 lb. **SUPPLIED:** Tablets, bottles of 50 and 500. Syrup, 1-pt. and 1-gal. bottles.

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"[Sulfacetamide]...among the least toxic but one of the most effective of the sulfonamides against urinary tract pathogens."²

1. Hughes, J., et al.: *South. M. J.* 47:1082, 1954.
2. Kerley, L., and Headlee, C. P.: *J. Am. Pharm. A. (Scient. Ed.)* 48:82, 1956

(Continued from Page 104)

Clifford W. Brainard, M.D., orthopedic surgeon of Battle Creek, has been appointed Special Advisor to the Crippled Children's Commission. His duties will extend throughout the state.

* * *

Martha Elliott Retires.—Those members who remember the many years of medical domination, or attempts at it, from Washington, will also remember Dr. Martha Elliott and the Children's Bureau which for years told the doctors what they could and could not do. Dr. Elliott, now of retiring age, will become Professor and head of the Department of Maternal and Child Welfare at Harvard University.

* * *

Congress on Medical Education.—The fifty-third annual Congress on Medical Education and Licensure will be held in Chicago's Palmer House, February 10-12, 1957. As in other years, the February program will center around an important current problem: graduate medical education for general practice.

Last year's co-sponsored program with the Advisory Board for Medical Specialties met with such success that it was decided to conduct another such program during the 1957 Congress.

Because of the general concern over preparation for general practice, the AMA Council on Medical Education and Hospitals decided to center a half-day co-sponsored program on Sunday, February 10, around discussion of the subject, "Graduate Medical Education for General Practice—1957." This program will be conducted as a symposium, covering the concept of what can be accomplished during the undergraduate four years of medical school. In addition, papers on the subject will be read, followed by a series of short, clear-cut statements by a group of representatives from the various specialty areas as to "What Should Constitute Graduate Medical Education for General Practice Today." There will also be a question-and-answer discussion period.

Sunday afternoon will be devoted to business meetings of the Advisory Board for Medical Specialties and the open meeting of Federation of State Boards of the United States.

The Monday afternoon session will be devoted to problems of postgraduate medical education. This will include keynote statements on the importance of postgraduate medical education and the challenges it presents, together with reasons for the council's current interest. This will be followed by a series of interesting papers.

On Monday evening, the Federation of State Medical Boards will hold its annual banquet, and on Tuesday, February 12, the conference program will be devoted to the Federation of State Medical Boards of the United States. Its program is centered on the theme: "Re-evaluation of the Licensing Examination."—*AMA Secretary's Letter.*

(Continued on Page 108)

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For good health, good nutrition, and tastier meals, be sure there is some fat—in reasonable amounts—in your daily diet. Meat—the most versatile of high protein and B vitamin foods—because of its many varieties and cuts is an excellent vehicle to provide this essential fat in any amount desired. Animal fat products, such as lard, are not only economical, but add delightfully to the taste appeal of hundreds of recipes.

The nutritional statements made in this advertisement have been reviewed by the Council on Foods and Nutrition of the American Medical Association and found consistent with current authoritative medical opinion.

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(Continued from Page 106)

Lloyd L. Kempe, M.D., associate professor of bacteriology, told a University of Michigan "Atom Day" gathering November 16, 1956, that the use of radiation does not involve uncertain steps into an "eerie, intangible, mysterious unknown world" as many people believe. Most of the ideas being worked on now in research are extensions of original ideas and theories published twenty to thirty years ago.

Dr. Kempe cited as an example of much practical experience in the use of radiation, and the exposure of individuals to it, the use and development of the x-ray. "X-radiation is very similar to gamma radiation which we are getting out of fission. This type of radiation has been dealt with for many years. It is nothing new," said Dr. Kempe.

He stated also that although much progress has been made in developing irradiation of foods and other substances for preservation, researchers are being painstakingly cautious to answer every possible question and overcome every potential danger before letting such processes get to the public. Food processed by radiation should not be offered to the public yet.

There is a basic difference between heat sterilization and sterilization by irradiation. The first method requires high temperatures to kill the putrefactive organisms, while other toxin-producing organisms are killed immediately at moderately hot temperatures.

* * *

Malaria Eradication Program in Mexico.—Approximately 3,000,000 houses in the malarious areas of Mexico will be sprayed starting January 1, 1957, in the largest undertaking of its kind ever attempted in this hemisphere. This enormous enterprise is aimed at wiping out the mosquitoes which transmit malaria, thus effecting the eradication of this disease in Mexico.

* * *



A sharp increase in the number of cattle infected with tuberculosis in recent years is attributed mainly to complacency according to the Department of Agriculture. The infection rate is currently about 0.8 per cent. Three years ago it was almost 0.4 per cent and for many years the rate was as low as 0.2 per cent. The same could happen with human TB if case finding is relaxed. Dr. Herbert R. Edwards, professor of public health and medicine at Yale University, in the 1956 Baker Lecture at the University of Michigan said, "It is not only complacency in the general public we must be concerned with, but the fact that a large number of professional workers, including some in the field of public health, are apparently not fully awake to the continued seriousness of the disease (tuberculosis)."

MICHIGAN TUBERCULOSIS ASSOCIATION

* * *

Mortality is not the real yardstick to measure the importance or judge the control of a disease. Even if there were drugs capable of preventing the sudden

(Continued on Page 110)



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Summit, N. J.

integrated relief...
mild sedation
visceral spasmolysis
mucosal analgesia

TABLETS (yellow, coated), each containing
50 mg. Trasentine® hydrochloride (adiphenine
hydrochloride CIBA) and 20 mg. phenobarbital.

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(Continued from Page 108)

deaths resulting from hypertension and arteriosclerosis, these conditions would remain a tremendous medical and social problem. Similarly, adults do not commonly die of mental disorders, arthritis, or peptic ulcers. Yet, no one would claim that these afflictions have been conquered. Neither has tuberculosis been conquered. Instead, the forces which have been at work during the past century have slowly converted it from a killing to a chronic disease.—RENE J. DUBOS, Ph.D., National Tuberculosis Association Transactions, May, 1954.

* * *

J. Earl McIntyre, M.D., of Lansing, was elected President of the Association of Surgeons of the Chesapeake and Ohio Railway System at the November annual meeting held at White Sulphur Springs, W. Va.

* * *

Paul H. Engle, M.D., of Olivet, has departed for Pakistan, India, under State Department appointment for two years at the American Embassy to serve the nationals of the area.

* * *

Courses in "Surgery in Acute Trauma" are being conducted by the American Army Medical Services at Army Hospitals in Washington, D. C., Denver, Colorado, San Francisco, California, Phoenixville, Pennsylvania, Fort Bliss, Texas, and Tacoma, Washington, April 1-3, 1957 and at Fort Sam Houston, Texas, May 6-8, 1957. For program and full information, write

E. Roy Wells, Director of Technical Advisory Office, Federal Civil Defense Administration, Region 4, Battle Creek, Michigan.

* * *

The ACS Chicago Regional Committee on Trauma is sponsoring an intensive course on fractures and other trauma at the John B. Murphy Auditorium, 50 E. Erie Street, Chicago, April 10-13, 1957. For information and program, write John J. Fahey, M.D., 1791 W. Howard Street, Chicago, Illinois.

* * *

O. T. Mallery, Jr., M.D., has been appointed to the newly created position of Medical Director for Employers Mutuals of Wausau, Wisconsin. Dr. Mallery was a member of the University of Michigan faculty for ten years.


* * *

The Seventh International Cancer Congress will be held in London, July 6-12, 1958. Further information and travel details may be procured from the Secretary General, 45 Lincoln's Inn Fields, London, W.C. 2, England.

* * *

Cancer News is available to all doctors of medicine who are members of the Michigan State Medical Society, through the courtesy and generosity of the two Divisions in Michigan of the American Cancer Society (the Southeastern Michigan Division covering the

(Continued on Page 112)



Both **CENTRAL** and **PERIPHERAL**
control of cough

SYNEPHRICOL® cough syrup

ANTITUSSIVE • DECONGESTANT • ANTIHISTAMINIC

Combines:

Central Antitussive Effect — mild, dependable

Topical Decongestion — prompt, prolonged

plus Antihistaminic and Expectorant Action

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Thenfadil® hydrochloride	4.0 mg.
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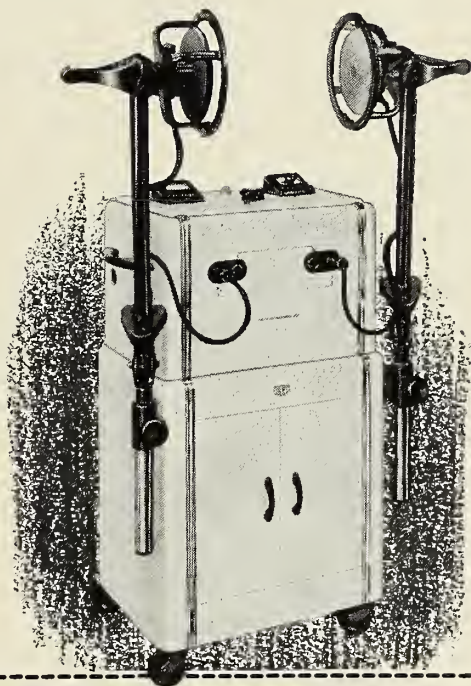
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(Continued from Page 110)

counties of Wayne, Oakland and Macomb, and the Michigan Division covering the balance of the state).

It is suggested this publication be placed in the waiting rooms of every doctor of medicine, as it contains excellent information for patients and others.

If you wish to be placed on the mailing list of either one of the ACS Divisions to receive *Cancer News* monthly, write to either one of the Divisions, in which area you are located—Michigan Division, Helmer Building, Grand Rapids, and Southeastern Michigan Division, 4811 John R. Street, Detroit, Michigan.

* * *

E. M. Vardon, M.D., Detroit, recently contributed a valuable Verifax (photographic copying) machine to the Michigan State Medical Society, for use in its Executive Offices at 606 Townsend, Lansing.

The Council expressed gratitude to Dr. Vardon by placing a vote of thanks to him on its minutes at the meeting of November 14.

* * *

Supplying necessary rehabilitative services emphasizes more than any other instance the combined role of the physician, hospital, and health department in meeting community needs.—L. E. BURNEY, M.D., California Medicine, January, 1956.

John P. Caffey, M.D., Professor of Radiology at Columbia University Medical School, New York, will deliver the annual Hickey Memorial Lecture at Wayne University College of Medicine Auditorium, 645 Mullett St., Detroit, on Thursday, March 14, 1957, at 8:30 p.m.

The Hickey Lecture is given under the auspices of the Detroit Roentgen Ray and Radium Society, the Wayne County Medical Society, and Wayne University College of Medicine.

Dr. Caffey's subject will be "The Skeleton in Cooley's Anemia."

This interesting lecture will be held coincident with the Michigan Clinical Institute at an hour when no MCI lectures or program are scheduled. All MSMS members are cordially invited to attend.

* * *

Next to knowing when to seize an opportunity, the most important thing in life is to know when to forego an advantage.

* * *

M.D. LOCATIONS—(Through December 1, 1956)

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Gerald S. Buchanan, M.D.	Ithaca
Paul A. Dosch, M.D.	Grayling

Assisted by Michigan Health Council

John L. Barrett, M.D.	Royal Oak
-----------------------	-----------

MEDICAL TELEVISION SHOWS Produced by Michigan Health Council

Date	Station	Subject	Guests
Nov. 4	WJBK-TV Detroit	The Story Behind Your Doctor's Prescription Food and Soil	Film Film
Nov. 8	WKAR-TV East Lansing	Orthodontics	Edward A. Cheney, D.D.S., Lansing Harlow Shehan, D.D.S., Jackson Christine Lancaster, St. Johns Christie Wiard, Lansing
Nov. 11	WJBK-TV Detroit	M.D. Placement (A Citizen Participates)	Film
Nov. 18	WJBK-TV Detroit	Multiple Sclerosis	Gabriel Steiner, M.D., Detroit A. H. Lindley, Detroit Abraham Brickner, Detroit
Nov. 25	WJBK-TV Detroit	A Life to Save	Film

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1. Science News Letter, March 1954

2. Greenblatt, R. B.: Obstet. & Gyn. 2:530, 1953

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1956-57 RADIO SERIES

Date	No.	Subject	Speaker
<i>October</i>			
10- 5-56	1	The Childless Couple	Samuel J. Behrman, M.D.
10-12-56	2	The Importance of Prenatal Care	Tommy N. Evans, M.D.
10-19-56	3	Preparing the Family for the New Baby	Ernest H. Watson, M.D.
10-26-56	4	What is the Meaning of Vomiting in the Baby?	Robert Heavenrich, M.D.
<i>November</i>			
11- 2-56	5	What is the Meaning of Diarrhea in the Baby?	William Stewart, Jr., M.D.
11- 9-56	6	Why does Your Baby Need "Shots"?	George Lowrey, M.D.
11-16-56	7	Muscular Dystrophy	Russell DeJong, M.D.
11-23-56	8	The Menopause	F. W. Tamblin, M.D.
11-30-56	9	Health Investments for Advancing Years	Seward E. Miller, M.D.
<i>December</i>			
12- 7-56	10	Why You Need an Annual Health Examination	John R. Rodger, M.D.
12-14-56	11	Rheumatism	William Mikkelsen, M.D.
12-21-56	12	Advances in the Treatment of Arthritis	William Caster, M.D.
12-28-56	13	Backache	Charles H. Frantz, M.D.
<i>January</i>			
1- 4-57	14	Research and the March of Dimes	James L. Wilson, M.D.
1-11-57	15	What is being done for the Polio Patient Today?	David G. Dickinson, M.D.
1-18-57	16	Body Functions and the Endocrine Glands	Jerome W. Conn, M.D.
1-25-57	17	The Thyroid Gland	William Bierwaltes, M.D.
<i>February</i>			
2- 1-57	18	Trends in the Treatment of Diabetes	Steven Fajans, M.D.
2- 8-57	19	Coronary Heart Disease	Park Willis, M.D.
2-15-57	20	Rheumatic Heart Disease	Aaron Stern, M.D.
2-22-57	21	How to Live with Your Heart Disease	Franklin Johnston, M.D.
<i>March</i>			
3- 1-57	22	High Blood Pressure	Sibley W. Hoobler, M.D.
3- 8-57	23	What can You do for the Victim of an Automobile Accident?	C. Thomas Flotte, M.D.
3-15-57	24	What can You do for the Burned Victim?	Robert E. L. Berry, M.D.
3-22-57	25	What can You do for the Person Who Swallows Poison?	Craig Booher, M.D.
3-29-57	26	What can You do to Prevent Accidents in the Home?	Robert H. Trimby, M.D.
<i>April</i>			
4- 5-57	27	Early Warning Signs of Cancer of the Female Generative Organs	Tommy N. Evans, M.D.
4-12-57	28	Breast Cancer	Burgess Vial, M.D.
4-19-57	29	Cancer of the Blood	Frank Bethell, M.D.
4-26-57	30	Cancer Research	Howard Latourette, M.D.
<i>May</i>			
5- 3-57	31	What is Cerebral Palsy?	Martha Westerberg, M.D.
5-10-57	32	What is Being Done for the Cerebral Palsied?	Richard Allen, M.D.
5-17-57	33	The Problem of Sex Education	Stuart Finch, M.D.
5-24-57	34	The Emotional Aspects of Epilepsy	H. Waldo Bird, M.D.
5-31-57	35	What can be Done for the Hard of Hearing?	James H. Maxwell, M.D.
<i>June</i>			
6- 7-57	36	Recent Advances in the Treatment of Tuberculosis	W. N. Davey, M.D.
6-14-57	37	The Medical Aspects of Cough	Nancy Furstenberg, M.D.
6-21-57	38	Appendicitis	Marion DeWeese, M.D.
6-28-57	39	Hay Fever	Robert Lovell, M.D.
<i>July</i>			
7- 5-57	40	Summer Itch	Richard Harrell, M.D.

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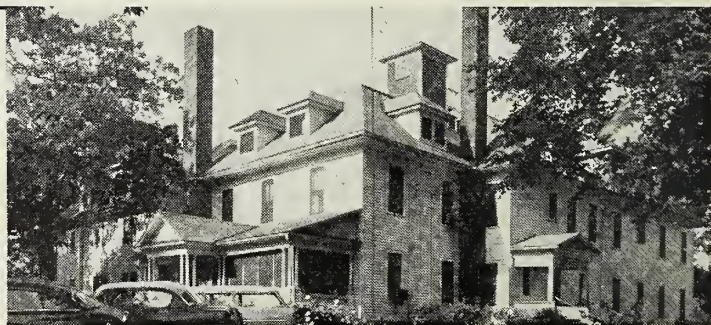
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Legal Opinions

Mr. William J. Burns
Executive Director
Michigan State Medical Society

Dear Mr. Burns:

In answer to inquiry as to the legality of consulting surgeons from out state who have no Michigan license but who are qualified men in their specialties:

I believe the answer is to be found in the statutes relating to the practice of medicine and surgery in Michigan. Section 7 of the Act (14.537 M.S.A.) makes it unlawful for any person to practice medicine or surgery in this state who is not the lawful possessor of a certificate of registration or license issued under and pursuant to the Michigan Registration Act. However, Section 8 of the Act (14.538 M.S.A.) provides in part as follows: "This Act shall not apply to the commissioned surgeons of the United States Army, Navy or Marine hospital service, in actual performance of their official duties, *nor to regularly licensed physicians and surgeons from out of this state, in actual consultation with physicians and surgeons of this state.*"

It is my opinion that the foregoing exception covers the situation outlined in the inquiry and that a regularly licensed physician and surgeon from out of the state and who is qualified may properly consult with physicians and surgeons in this state.

Very truly yours,
LESTER P. DODD, *Legal Counsel*

Dear Mr. Burns:

You recently referred to me for opinion an inquiry with respect to so-called "privileged communications."

Specifically, the doctor inquires as to the propriety

- (1) of giving information with respect to injuries sustained by a patient to a newspaper for publication therein, and,
- (2) of giving information pertaining to the diagnosis and prognosis to a Red Cross Worker for the purpose of informing or obtaining leave for a Serviceman relative.

These inquiries present interrelated questions of law and ethics. The Michigan Statutes deal with the general subject of privileged or confidential communications in two ways. Section 27.911 M.S.A. provides in part as follows:

"No person duly authorized to practice medicine or surgery shall be allowed to disclose any information which he may have acquired in attending any patient in his professional character, and which information was necessary to enable him to prescribe for such patient as a physician, or to do any act for him as a surgeon."

This Section is a part of the Judicature Act and pertains primarily to court procedures. It is essentially a rule of evidence and is invoked only in relation to determining what a physician or surgeon may or may not be permitted to testify to on the witness stand. The privilege is that of the patient and not of the doctor and may be waived either expressly or impliedly by the patient. Moreover, the privilege applies only to such matters as are given to the physician in confidence and does not apply to many items of information gained by the physician from observation. This statute is not a penal one and, as observed above, is intended primarily to apply to a physician's disclosures while a witness in court.

(Continued on Page 120)

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(Continued from Page 118)

Another section of the Michigan Statutes (14.533 M.S.A.) makes it a ground for refusal of registration, revocation or suspension of registration, or conviction of a misdemeanor for a physician to "willfully betray a professional secret."

The Statute does not define what constitutes the willful betrayal of a professional secret and has never been before our courts for construction so that its interpretation is a matter of first impression. In my opinion, however, it relates solely to the keeping in confidence of such matters as are disclosed to the physician by the patient while in professional attendance upon the patient and which are given in confidence and with the intention that they be kept secret.

From a strict legal point of view, it is my opinion that neither of the questions posed would involve violation of the so-called "privileged communication" statute above quoted since court action is not involved.

As to whether giving out information under either set of circumstances outlined by the doctor would involve betrayal of a professional secret would depend wholly upon the specific information disclosed. If it did not include or depend upon information conveyed by the patient in confidence and with the intention that it be kept secret, it would not, in my opinion, be a violation.

I feel, however, that the questions here raised involve such inter-related questions of law and professional ethics as to warrant some discussion of the latter aspect of the matter. Assuming that in most cases it would not be unlawful to disclose information under either set of circumstances outlined by the doctor, the propriety of so doing, particularly the giving of information to newspapers, may be open to question.

Section 5 of Chapter I of the Principles of Medical Ethics of the American Medical Association, having

to do with the physician's relationship to the media of public information, states that "an ethical physician * * * may reveal information regarding a patient's physical condition *if the patient gives his permission.*" While not stated in the converse, this language rather strongly implies that it would not be regarded as ethical to disclose such information without the patient's permission. I am quite willing to assume that there may be circumstances where such permission may be implied but in the absence of either express or implied permission, I am of the opinion that a physician may not, with propriety, give information about his patient's injuries to a newspaper for publication.

With respect to the propriety of giving information to a Red Cross Worker under the circumstances outlined by the doctor, I reach a somewhat different conclusion. Here the physician cannot be charged with advertising or self-aggrandizement as he might in the case of giving information to a newspaper. Section 3 of Chapter II of the Principles of Medical Ethics of the American Medical Association provides: "the physician should neither exaggerate nor minimize the gravity of a patient's condition. He should assure himself that the patient, *his relatives or his responsible friends* have such knowledge of the patient's condition as will serve the best interests of the patient and the family."

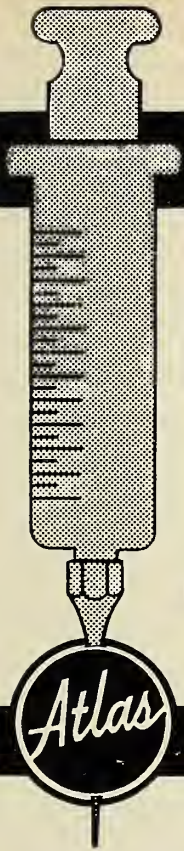
I am of the opinion, therefore, that subject always to the necessity of making sure that he does not disclose information given to him by his patient in confidence, the physician may, in the exercise of his judgment of what is in the best interest of his patient, lawfully and with propriety, give information to a Red Cross Worker under the circumstances outlined in the doctor's second question.

Very truly yours,

LESTER P. DODD, *Legal Counsel*

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Correspondence

It has been brought to my attention that some of the persons with whom we have negotiated contracts under the Dependents' Medical Care Act are of the opinion that the Program is not one of full service coverage. This concept may have arisen because the Act itself is not specific regarding this matter. It may also have arisen either because certain fees are stipulated to be paid by the patient or because the contract allows for unusual or difficult case an additional fee payable by the Government to the physician if he makes proper request under a special report.

Upon inquiry, I have been assured that members of negotiating teams have not indicated the contract is other than for full coverage. Further, no instance has been found where any member of the negotiating teams has, in any way, intimated that the Dependents' Medical Care Program is not one of full coverage.

In order to clarify this matter and to avoid any improper interpretation of the Dependents' Medical Care Act with regard to payments to physicians under a Schedule of Allowances as provided in our contracts, the position of the Department of Defense as is being carried out by my office is submitted for your guidance:

(a) It is intended that civilian medical care authorized under Public Law 569, 84th Congress, will be on a basis comparable to that provided in uniformed services medical facilities. Except for specified amounts to be paid by the patient, the services which are provided under the law will be furnished by physicians participating in the program who will receive payment in full

from the Government in accordance with the published Schedule of Allowances or under a special report as the case may be. In most instances, this means that the physician participating in the program will receive payment for his usual charge or the amount established in the local schedule of allowances, whichever is less.

(b) Section 5, paragraph 507b, of the Joint Directive promulgated by the Secretary of Defense and the Secretary of Health, Education, and Welfare provides as follows: "The Executive Agent (Secretary of the Army) shall be responsible within the continental United States, Alaska, Hawaii, and Puerto Rico for the following:

(1) Preparation of the terms and placement of the contract or contracts to be established to include but not limited to:

(a) Local schedules of allowances to be used in *full payment* of bills presented by physicians and surgeons." (Underscoring added.)

A copy of this Joint Directive is an integral part of every contract and there is no question that the contract provides for full service coverage.

(c) There may be unusual instances in which the physician will believe that an allowance greater than that prescribed in the local schedule of allowances is justified. In such cases, the physician should look to the Government for additional payment, and not to the patient. Provision is made for the physician to submit a special report to his state medical society and in turn to the Government as a request for additional payment. Such additional payment will be made upon approval by the medical society's review board and by the Government's contracting officer.

Your assistance in providing physicians in your state with this information will be helpful to all concerned. We believe that a clear understanding of this matter before the Dependent's Medical Care Program goes into

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fect is essential and will help to prevent problems or criticisms which otherwise might result from a lack of understanding on the part of physicians participating in the program.

Your co-operation and assistance in implementing the Dependents' Medical Care Program is most gratifying and with your continued help I believe the program will be most successful.

Sincerely,

PAUL I. ROBINSON
Major General, M.C.
Executive Director

Office for Dependents' Medical Care

Department of the Army
Office of the Surgeon General
Washington, D. C.
9 November 1956

BLOOD TRANSFUSIONS

Animals Used 300 Years Ago

Blood transfusion as a means of preserving life reached an indispensable place in today's medicine only after centuries of trial and error.

The first authentic record of a blood transfusion shows that 300 years ago an Italian physician, Francesco Folli experimented with animal transfusions, although during the fifteenth century unsuccessful transfusions were performed through a hollow quill.

England was the scene of several experiments in 1666, some of which were witnessed by Pepys and recorded in his Diary. But, during this period the operation created an unfavorable public reaction since blood used in transfusion to humans was usually that from a lamb or a calf.

No further attempts were recorded until the 1800's, when it was discovered that removal of the fibrin from the blood eliminated coagulation during transfusion.

Again, however, the record shows little advance until 1907 when Dr. George W. Crile, Cleveland surgeon, performed a successful direct transfusion, suturing the blood donor's artery to the patient's vein in the wrist. At this time the brother of the patient was used, since it was felt his blood would be most suitable.

* * *

Money is such an elusive thing—not only to get and keep, but even to keep track of. New reports say that Americans owe more than ever before, some 700 billion dollars in public and private debt—up a whopping 294 billion since World War II ended. But along with this, the reports say also that Americans are richer than ever before—they own, in public and private wealth, some 1½ trillion dollars' worth of property, and this year their income will be 340 billion dollars. But still another report says that all this doesn't mean what it seems to mean; that rising taxes and inflation since 1939 have made \$6,122 now equal actually to only \$1,000 then. However you slice it, money, it seems, is still purely relative.—*B. C. Enquirer*, Oct. 24, 1956.

* * *

Postgraduate course in Diabetes and Basic Metabolic Problems will be held January 30, 31 and February 1, 1957, at Columbus, Ohio, University Health Center. For further information and registration forms, write: American Diabetes Association, 1 East 45th Street, New York 17.

* * *

The Frank E. Bunts Educational Institute of the Cleveland Clinic Foundation will present a course on "General Practice" February 6-7, 1957, "Otolaryngology" February 27-28, 1957, and "Medical Progress and its Relationship to Deontology" on March 13-14, 1957. For additional information and registration forms write: Registrar, 2020 East 93rd Street, Cleveland 6, Ohio.

JANUARY, 1957

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BOOKS RECEIVED

AIRCRAFT IN DISTRESS. A Study of the broad field of aircraft assistant and distress operations, flying safety, aircraft emergencies and evacuation, rescue aircraft interception procedures, aircraft emergency landing and ditching procedures, and first-aid and survival. Harry D. Kysor, Captain, Eastern Air Lines, Inc. New York; Aviation Consultant to the Aviation Bureau, Loss Prevention Department, Liberty Mutual Insurance Company, Boston, Massachusetts. Philadelphia: Chilton Company, Inc., 1956.

MYSTERIOUS WATERS TO GUARD. (Essays and Addresses on Anesthesia). By Wesley Bourne. Springfield, Illinois: Charles C Thomas, 1955. Price \$8.50.

DISEASES OF THE LIVER. Edited by Leon Schiff, M.D., Ph.D., Professor of Clinical Medicine, University of Cincinnati, College of Medicine; Director, Gastric Laboratory, Cincinnati General Hospital. With A Foreword by Cecil J. Watson, M.D., Ph.D., Philadelphia and Montreal: J. B. Lippincott Company, 1956. Price \$16.00.

BELLEVUE IS MY HOME. By Salvatore R. Cutolo, M.D., with Arthur and Barbara Gelb. Garden City, New York: Doubleday & Company, Inc., 1956. Price \$4.00.

CLINICAL ELECTROCARDIOGRAPHY. Part I. The Arrhythmias With An Atlas Of Electrocardiograms By Louis N. Katz, A.B., M.A., M.D., F.A.C.P. Director, Cardiovascular Department, Michael Reese Hospital, Chicago, Illinois; Professional Lecturer in Physiology, University of Chicago, Chicago, Illinois. And Alfred Pick, M.D., Physician-In-Charge of Heart Station and Research Associate, Cardiovascular Department, Michael Reese Hospital, Chicago, Illinois. Illustrated With 415 Engravings. Philadelphia: Lea & Febiger, 1956. Price \$17.50.

THE OFFICE ASSISTANT in Medical or Dental Practice. By Portia M. Frederick, Instructor, Medical Office Assisting, Long Beach City College, and Carol Townner, Executive Assistant, Department of Public Relations, American Medical Association. Philadelphia and London: W. B. Saunders Company, 1956.

DISTURBANCES OF BODY FLUIDS. Clinical Recognition and Management. By John H. Bland, M.D., Associate Professor of Medicine, University of Vermont College of Medicine. Second edition. Philadelphia and London: W. B. Saunders Company, 1956.

TEXTBOOK OF MEDICAL PHYSIOLOGY. By Arthur C. Guyton, M.D. Professor and Chairman of the Department of Physiology and Biophysics, University of Mississippi School of Medicine. Illustrated. Philadelphia and London: W. B. Saunders, 1956.

IN THE DOCTOR'S OFFICE. The Art of the Medical Assistant. By Esther Jane Parsons, formerly Research Technician, Department of Biochemistry, College of Physicians and Surgeons, Columbia University; formerly Instructor in Medical Office Procedures,

(Continued on Page 126)



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(Continued from Page 124)

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Romeo, Michigan

Paine Hall School for Medical Assistants, New York City. Illustrations by Jean McConnell. Second edition. Philadelphia and Montreal: J. B. Lippincott Company, 1956. Price \$3.95.

THE NEUROSES IN CLINICAL PRACTICE. By Henry P. Laughlin, M.D., Assistant Clinical Professor of Psychiatry, George Washington University School of Medicine; Head, Psychiatry and Neurology Division, Suburban Hospital, Bethesda, Maryland; Consultant in Psychiatry, Walter Reed Army Medical Center. Philadelphia, London: W. B. Saunders Company, 1956. Price \$12.50.

YOUR BLOOD PRESSURE and How to Live With It. By William A. Brams, M.D. Illustrations by Hertha Furth. Philadelphia and New York: J. B. Lippincott Company, 1956. Price \$2.95.

DICTIONARY OF POISONS. By Ibert Mellan and Eleanor Mellan. New York: Philosophical Library. Price \$4.75.

This book is printed in large type and easily read. Each poison is listed in alphabetical order and there is a full history or description of the poison, its uses and forms, the scientific and common names and the antidote to be given. Usually there is a list of three things to do, and on many in capital letters there is a warning **CALL A PHYSICIAN**. Sometimes the word **IMMEDIATELY** is added! We notice one item that is repeated many times, "give a universal antidote," but we are unable to find such a formula in the book. There is a recognized universal antidote consisting of charcoal, or burnt toast, strong tea or tannic acid, with magnesium sulfate in a mixture.

SLEEP. By Marie Carmichael Stopes, D.Sc., London; Ph.D., Munich; Fellow of the Royal Society of Literature. New York: Philosophical Library. Price \$3.00.

Sleep is the primitive and profound pleasure of all mankind. It is enjoyed when past. Many people sleep badly and to some inducing sleep is an effort. The amount of sleep needed varies from one person to another but fairly constant for individuals. Short periods of daytime sleep often give proportionately more refreshment than the long sleep at night. "It is a crime of the first magnitude to wake anyone, save in an emergency."

Chapters are devoted to Beds and Bed Clothes, What Is Sleep, Sleep in Animals, Insomnia, Do's and Don'ts and Feeling versus Thought. It is readable.

TREATMENT OF HEART DISEASE. A Clinical Physiologic Approach. By Harry Gross, M.D., F.A.C.P., Attending Physician, the Montefiore Hospital; Assistant Clinical Professor of Medicine, Columbia University College of Physicians and Surgeons, and Abraham Jezer, M.D., Attending Physician, The Montefiore Hospital; Assistant Clinical Professor of Medicine, Columbia University College of Physicians and Surgeons. Philadelphia and London: W. B. Saunders Company, 1956.

In no other text on heart disease has the reviewer noted a more concise yet complete interpretation of clinical cardiology and therapeutics based upon the

(Continued on Page 128)

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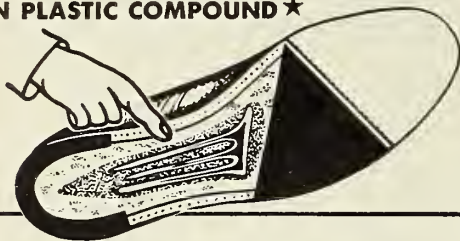
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(Continued from Page 126)

now voluminous theoretical and experimental work on the subject. The reader is not overwhelmed with a never-ending detail of experimental statistics; instead theoretical and experimental topics are well indexed for those in search of greater detail, while the average reader finds facts sufficient to draw logical conclusions. The authors have achieved their objective very well "to reach the general physician who, imbued with the physiological point of view, may more readily understand the symptoms and clinical course of his patients."

The volume is divided into seven parts, the first of which consists of an excellent summary of cardiac physiology. Digitalis and Quinidine are discussed thoroughly in succeeding chapters, followed by an excellent chapter on the arrhythmias. Congestive heart failure is dealt with in the light of present knowledge of chemistry and physiology. In the chapter on The Diet and Heart Disease, the factors of nutrition in heart disease are described. Sample diets and menus, including numerous recipes, are listed in detail in the appendix, composing one of the practical features of the book. Part II is concerned with the discussion of Hypertension, Hypertensive Heart Disease and Arteriosclerotic Heart Disease. Part III presents diseases of the heart secondary to inflammation, including Rheumatic Fever, Subacute Bacterial Endocarditis, Luetic Heart Disease, Cor Pulmonale, Non-specific Myocarditis and Pericarditis. In light of the marked advances in the diagnosis and treatment of congenital heart disease, part IV is well written to bring the busy physician an awareness of congenital heart disease and its management. The fifth section of the book, Surgery in the Cardiac Patient, contains chapters on anesthesia, preoperative and post-operative care, and pregnancy in the cardiac patient. Part VI, Disease of the Heart Secondary to Metabolic Disorders, Hyper and Hypothyroidism, is adequately discussed along with Beriberi Heart Disease. In the opinion of the reviewer, the closing chapter is one of the best features of the book. It discusses adequately the psychosomatic aspects of heart disease, how to live with a sick heart, and the rehabilitation of the cardiac patient.

G.A.Z.

PHYSICAL DIAGNOSIS. By Ralph H. Major, M.D. Professor of Medicine and of the History of Medicine, The University of Kansas, and Mahlon H. Delp, M.D., Professor of Medicine, The University of Kansas. Fifth Edition, Illustrated. Philadelphia and London: W. B. Saunders Co., 1956. Price \$7.00.

Major's Diagnosis, in its fifth edition, has an added author and is almost an entirely new book. Much has been rewritten, and the arrangement of chapters and sequence is changed for the better. It is well printed on non-gloss paper, in large clear type, and is easily readable. The illustrations are profuse and well selected to illustrate the text.

CLINICAL EXAMINATIONS IN NEUROLOGY. By Members of the Section of Neurology and Section of Physiology, Mayo Clinic and Mayo Foundation for Medical Education and Research, Graduate School,

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Robert G. Siekert, M.D.; Jack P. Whisnant, M.D.
Philadelphia and London: W. B. Saunders Company,
1956.

This outline of the clinical neurologic examination
was written by members of the Section of Neurology
and Section of Physiology of the Mayo Clinic. As it
was intended as a guide to the Fellows of the Mayo
Foundation, it includes a chapter on the forms and
methods used in recording the results of the neurologic
examination. A series of these forms is included.

There are chapters on The Neurologic History, Gen-
eral Observations and Order of Procedure, The Cranial
Nerves, Motor Function, Reflexes, The Sensory Ex-
amination, Mental Function, Language and Motor
speech, Autonomic Function, Clinical Examinations in
Selected Problems of Pain, Electroencephalography,
Electromyography and Electric Stimulation of Periph-
eral Nerves and Muscle, Biochemical and Pharmacologic
Aids in Neurologic Diagnosis, Examinations of
Cerebrospinal Fluid by Lumbar and Cisternal Puncture.

The book is well organized, well written, and liter-
ally packed with practical information. Though it is
difficult to select any specific portion for comment,
the anatomic diagrams in the chapter on Motor Func-
tion are unusually good and should be of help in

this most important but often tedious portion of the
neurologic examination. The Table of Contents, the
Index and the general organization of the book make
it easy to use as a reference and it is recommended
not only to the neurologist but also to anyone in the
active practice of medicine.

F.O.M.

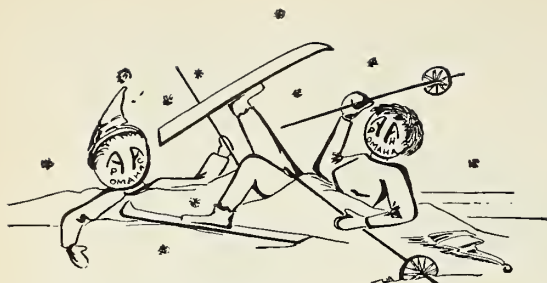
INTERNATIONAL MEDICAL FILM PROGRAM

The international medical film program, new feature
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meeting, is creating considerable interest abroad, ac-
cording to Ralph P. Creer, AMA Director of Motion
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The aim of the film program is to bring before the
doctors attending the meeting outstanding motion pic-
tures produced abroad dealing with many aspects of
medical science. This feature is in support of the
People-to-People Program which President Eisenhower
launched this summer and in which the medicine and
health professions are co-operating under the chairman-
ship of Dr. Louis H. Bauer, Secretary-General of the
World Medical Association.

In connection with this film program, which is to be
held at the Barbizon Plaza Hotel in New York City,
June 3-7, 1957, a discussion is planned on the problems
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THE YEAR 1956: MEDICARE

(Continued from Page 94)

terms of the law these are to be renegotiated before July 1, 1957.

When Michigan sent to Washington, D. Bruce Wiley, M.D., Chairman of the Council, MSMS, Jay C. Ketchum, Executive Vice President of Michigan Medical Service and the attorney, they found the proffered contract could not be signed on account of fine points of understanding and extended services implied. Negotiations were extended nearly three weeks before questions were resolved. The contract was signed November 15, 1956. More than ten years of administering the veterans' program pointed out features to be avoided.

We believe the trial time until July 1, 1957, will prove the Michigan concept of medicare warrants continuing. Seven state medical societies have signed to operate their own program, one has designated a commercial insurance company, and to date thirty-three have named Blue Shield.

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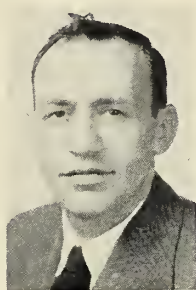
FEBRUARY, 1957

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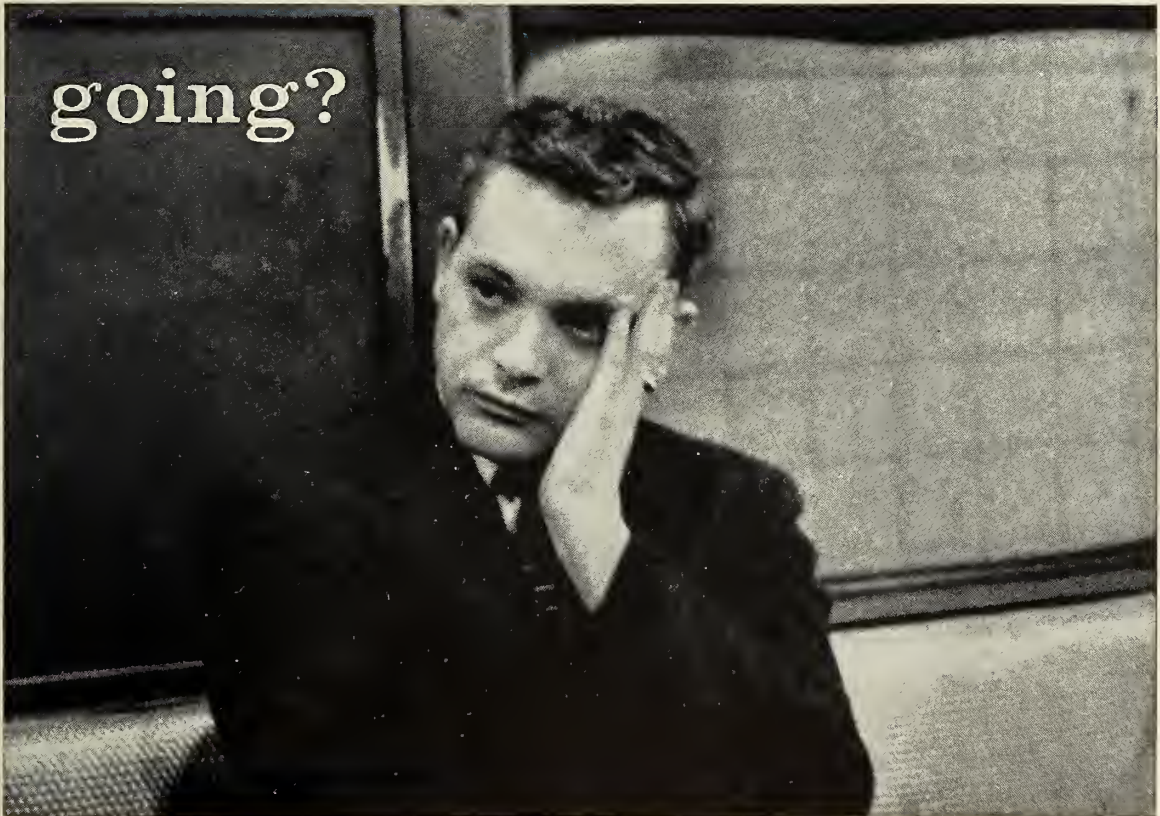
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DICKINSON-IRON	R. E. Carlson, M.D., Iron Mountain	D. T. Anderson, M.D., 400 Woodward Ave., Iron Mountain
EATON	Fred L. Arner, M.D., Bellevue	Joseph Riley, M.D., 201½ S. Cochran, Charlotte
GENESEE	O. J. Preston, M.D., Flint	J. B. Rowe, M.D., 202 Paterson Bldg., Flint
GOGEBIC	J. E. McEnroe, M.D., Ironwood	W. H. Wacek, M.D., Grand View Hospital, Ironwood
GRAND TRAVERSE-LEELANAU-BENZIE	John G. Milliken, M.D., Traverse City	Bernard Sweeney, M.D., 227½ Grandview Parkway, Traverse City
GRATIOT-ISABELLA-CLARE	R. F. Hall, M.D., Mt. Pleasant	J. M. Wood, M.D., 815 E. Maple St., Mt. Pleasant
HILLSDALE	H. F. Mattson, M.D., Hillsdale	M. P. Bates, M.D., 108 S. Manning, Hillsdale
HOUGHTON-BARAGA-KEWEENAW	T. P. Wickliffe, M.D., Calumet	F. W. Larson, M.D., 1400 E. Houghton, Houghton
HURON	T. L. Bash, M.D., Kinde	C. F. Wible, M.D., Sebewaug
INGHAM	G. A. Sherman, M.D., Lansing	R. H. Trimby, M.D., 122 W. Hillsdale, Lansing
IONIA-MONTCALM	John F. Tannheimer, M.D., Ionia	J. A. Van Loo, M.D., 103 E. Washington, Belding
JACKSON	L. F. Thalner, M.D., Jackson	H. W. Porter, M.D., 505 Wildwood Ave., Jackson
KALAMAZOO	John V. Fopeano, M.D., Kalamazoo	E. O. Pearson, M.D., 458 W. South St., Kalamazoo
KENT	D. B. Hagerman, M.D., Grand Rapids	G. A. Mulder, M.D., 26 Sheldon Ave. S.E., Grand Rapids
LAPEER	Thomas Buchanan, M.D., Imlay City	James Doty, M.D., 315 Clay St., Lapeer
LENAWEE	George C. Wilson, M.D., Clinton	A. J. Phelan, M.D., 102 S. Pearl St., Tecumseh
LIVINGSTON	E. G. Walker, M.D., Lakeland	R. M. Duffy, M.D., 250 E. Main St., Pinckney
LUCE	T. W. Thompson, M.D., Newberry	R. P. Hicks, M.D., 210 W. John St., Newberry
MACOMB	Edward G. Siegfried, M.D., Mt. Clemens	Dan Zavala, M.D., 22644 Gratiot, East Detroit
MANISTEE	E. C. Hansen, M.D., Manistee	Ruth E. Lalime, M.D., 12395 Lynn, Bear Lake
MARQUETTE-ALGER	A. S. Narotzky, M.D., Ishpeming	J. R. Acocks, M.D., Morgan Heights Sanatorium, Marquette
MASON	J. R. Carney, M.D., Ludington	A. F. Boon, M.D., 203 N. Ferry, Ludington
MECOSTA-OSCEOLA-LAKE	Jacob Bruggema, M.D., Evart	J. A. White, M.D., 121 S. Michigan Ave., Big Rapids
MENOMINEE	F. J. DeWane, M.D., Menominee	L. G. Glickman, M.D., 958 First St., Menominee
MIDLAND	Leonard Poznak, M.D., Midland	Benjamin B. Holder, M.D., Dow Medical Department, Midland
MONROE	J. P. Flanders, M.D., Monroe	W. A. Meier, M.D., 105 E. Front St., Monroe
MUSKEGON	E. J. Lauretti, M.D., Muskegon	H. C. Tellman, M.D., 706 Hackley Bank Bldg., Muskegon
NEWAYGO	Robert E. Paxton, M.D., Fremont	J. Paul Klein, M.D., 16 West Sheridan, Fremont
NORTH CENTRAL	George L. Schaiberger, M.D., West Branch	Charles Oppy, M.D., Roscommon
NORTHERN MICHIGAN	Victor Mateskon, M.D., Petoskey	E. F. Crippen, M.D., 126½ State St., Mancelona
OAKLAND	Hazen L. Miller, M.D., Royal Oak	G. N. Petroff, M.D., 1301 Pontiac St. Bank Bldg., Pontiac
OCEANA	W. G. Robinson, M.D., Hart	W. G. Robinson, M.D., 219 State St., Hart
ONTONAGON	H. B. Hogue, M.D., Ewen	W. F. Strong, M.D., Ontonagon
OTTAWA	John Winters, M.D., Grand Haven	William Westrate, Jr., M.D., 17 W. 10th St., Holland
SAGINAW	J. E. Manning, M.D., Saginaw	C. G. Kramer, M.D., 3900 Holland Road, Saginaw
ST. CLAIR	Charles N. Hoyt, M.D., Port Huron	C. D. Selby, M.D., 1916 Military, Port Huron
ST. JOSEPH	Raymond D. Zimont, M.D., Constantine	C. G. Porter, M.D., 226 East St., Three Rivers
SANILAC	John W. McCrea, M.D., Marlette	E. W. Blanchard, M.D., Deckerville
SHIAWASSEE	Walter D. Buzzard, M.D., Chesaning	Norman F. Bach, M.D., 113 E. Williams, Owosso
TUSCOLA	R. R. Howlett, M.D., Caro	E. N. Elmendorf, M.D., Vassar
VAN BUREN	R. I. McFadden, M.D., Bloomingdale	Arthur E. Parks, M.D., Lawton
WASHTENAW	Frank H. Bethell, M.D., Ann Arbor	B. C. Payne, M.D., 202 Michigan Theatre Bldg., Ann Arbor
WAYNE	L. R. Leader, M.D., Detroit	R. R. Cooper, M.D., 4421 Woodward Ave., Detroit 1
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You and Your Business

PROFESSOR COLLER TO MODERATE AT MCI



The hour 5:00 to 6:00 p.m. on Wednesday, March 13, 1957, will be an interesting, instructive and stimulating period at the Michigan Clinical Institute. Frederick A. Coller, M.D., Professor of Surgery and Head of the Department, University of Michigan, Ann Arbor, will hold forth during that sixty minutes as Moderator of a panel comprising

all the seven speakers on the Wednesday program.

In order of appearance, the March 13 guest lecturers and their topics are:

1. JOHN H. GARLOCK, M.D., New York City—"Present Day Approach to the Surgical Therapy of Non-specific Ulcerative Colitis."

2. JOHN H. GIBBON, JR., M.D., Philadelphia—"Pulmonary Ventilation During Surgical Operations."

3. L. HENRY GARLAND, M.D., San Francisco—"The Pursuit of the Unorthodox."

4. CHARLES B. HUGGINS, M.D., Chicago—"Control of Human Cancers by Endocrinologic Methods."

5. FRANK H. MAYFIELD, M.D., Cincinnati—"Whip Lash Injuries."

6-7. RALPH C. MOORE, M.D., Omaha, and CHARLES L. MARSH, M.D., Valley, Nebraska—"The Medical Aspects of Highway Accidents."

A provocative period can be prophesied for the panel discussion of Wednesday, March 14, during the 1957 Michigan Clinical Institute—with F. A. Coller, M.D., in the "driver's seat!"

NEW INTERNATIONAL PRIZES FOR FAMILY PHYSICIANS

A new series of prizes for family physicians of any country has been announced in London by B. D. Thornley, managing director of Bengel Laboratories, British pharmaceutical firm. The prizes total 500 pounds in value and will be known as the "Bengel Prizes for Original Observations in General Practice." Entries will be judged by the awards committee of the British College of General Practitioners.

The ideas or hunches or subject matter may be concerned with the causation, diagnosis, treatment or prevention of any disease. All entries will be published and the book will be available

to physicians everywhere. Physicians' ideas may prove a stimulus to medical research workers everywhere, whether in hospitals, special institutions or pharmaceutical companies. Among the obscure and unassuming family doctors of the world there may be another Jenner or another Lind.

Manuscripts or correspondence should be addressed to Bengel Laboratories, Ltd., Holmes Chapel, Cheshire, England.

THE GENESEE COUNTY MEDICAL SOCIETY

Cordially Invites Every Member Of The
Michigan State Medical Society To Attend

THE TWELFTH ANNUAL CANCER DAY

Wednesday, April 17, 1957

Merliss Brown Auditorium—Hurley Hospital
Flint

9:30 A.M.

Morning Session

Address of Welcome

Otto J. Preston, M.D., President, Genesee County
Medical Society, Flint

Presiding—Arch Walls, M.D., President, Michigan
State Medical Society, Detroit

"Cancer of the Breast"—Grantley W. Taylor,
M.D., Department of Surgery, Harvard University
and Massachusetts General Hospital, Boston

"Cobalt-60 Radiotherapy for Cancer"—Isadore
Lampe, M.D., Department of Radiology, University
of Michigan Hospital, Ann Arbor

"Progress in the Control and Therapy of Cancer"
—Sidney Farber, M.D., Professor of Pathology,
Harvard Medical School; Director, Children's
Cancer Research Foundation, Boston

Afternoon Session

Presiding—Charles S. Kennedy, M.D., Detroit,
Member, Board of Regents, University of Michigan

"Cancer of the Colon"—Warren H. Cole, M.D.,
Professor of Surgery, University of Illinois College
of Medicine, Chicago

"Cancer of the Prostate"—Perry B. Hudson,
M.D., Department of Urology, Columbia University;
Chief, Urological Service, Frances Delafield Hospital,
New York City

"General Considerations in Cancer Management"
—Carl A. Moyer, M.D., Bixby Professor of
Surgery, Washington University, St. Louis.

(Continued on Page 144)



Many of your patients, Doctor, are among the millions of people who have seen this newest Parke-Davis advertisement on the cost of today's more effective medical care. We believe that this sensible-talking ad—the latest in a continuing P-D series appearing in LIFE, TIME, SATURDAY EVENING POST and TODAY'S HEALTH—dramatically confirms our year-long public service message to your patients: *“prompt and proper medical care may well turn out to be one of the biggest bargains of your life.”*

You may be assured that Parke-Davis national advertising will continue to be in our mutual best interests . . . designed to give your patients a better understanding of costs and a clearer appreciation of the effectiveness of modern medical care. PARKE, DAVIS & COMPANY, Detroit 32, Michigan.

(Continued from Page 142)

WAYNE COUNTY MEDICAL SOCIETY BREAKS GROUND FOR NEW BUILDING

Two silver spades helped to rearrange some important dirt at the formal groundbreaking ceremony of the new David Whitney House, soon to be headquarters for the Wayne County Medical Society on the campus of Wayne State University, Detroit. Wielders of the dirt pushers at the December 19 ceremony were WCMS President Luther R. Leader, M.D., Lawrence Reynolds, M.D. and Milton A. Darling, M.D.

This medical milestone in Wayne County was recognized by the press through a heart-warming editorial in the *Detroit Times* of December 23 which read:

A Great Profession

We were pleased when the Wayne County Medical Society broke ground the other day for its new headquarters building that there was considerable emphasis by the doctors on the importance of good deeds rather than fancy words.

There was more emphasis on the part that physicians do and must play in training of new doctors.

There even was a reference to a fact well known to doctors but overlooked by most of the public, that our doctors in Michigan, contrary to popular belief, have been urging for years that more doctors be trained in the schools, and that Wayne State University be expanded for that purpose.

We wish the doctors good fortune with their new building.

We wish also to express our respect to the profession for its genuine service and genuine public spirit in trying to provide still more doctors to serve us.

The medical profession, often criticized, remains a great one, and one with a real spirit of good citizenship.

Congratulations, Wayne County Medical Society, on your great day of progress. Significant is the increasing rapport with Wayne State University in this new "good neighbor" activity.

HIGHLIGHTS OF EXECUTIVE COMMITTEE OF THE COUNCIL

Meeting of December 12, 1956

- **Medicare Program:** It was reported that recommended changes in the Medicare Program, including fee schedule, should be submitted before July 1, 1957.
- **Practice of Psychotherapy:** Attorney General's reply in answer to criticism made before 1956 MSMS House of Delegates re AGO No. 2359 (ruling that the practice of social work including psychiatric social work and the practice of psychology are not violative of the Medical Practice Act) was read; the Executive Committee instructed that copies be sent to all parties in interest.

- **Officers Night Banquet, 1957:** Arrangements for this dinner, to be held in the Pantlind Hotel, Grand Rapids, were approved.
- **"Community Health Association":** Dr. Walls stated that he as an individual had been invited to attend the January 11 meeting of this group which will consider formation of a pre-paid hospital-medical care plan under union et al auspices.
- **Appointments:** O. K. Engelke, M.D. of Battle Creek, to represent MSMS at AMA Rural Health Conference, March 7-9, Louisville, Kentucky; J. R. Rodger, M.D., Bellaire, to represent MSMS at public hearings before U. S. House of Representatives on traffic safety.
- **Reports:** O. B. McGillicuddy, M.D., reported on November 17 Conference on Teacher Certification Code, East Lansing; Secretary Foster reported on contents of booklet entitled "Private Practice of Medical School Faculty Members."
- **Beaumont Memorial:** Chairman Otto O. Beck, M.D., reported that 450 MSMS members had contributed (to December 11) the sum of \$5,095 to underwrite the deficit. A vote of thanks to these generous donors was placed on the Executive Committee minutes.
- **1956 MSMS Annual Session Attendance** was reported, with a breakdown as to Michigan communities and medical specialties represented.
- **Plaque Presented by the Michigan State Pharmaceutical Association** to the MSMS Executive Office staff for cooperative work during 1956 was displayed.
- **Committee on Uniform Fee Schedule for Governmental Agencies** was appointed by Council Chairman D. Bruce Wiley, M.D.: T. H. Hunt M.D., Detroit, Chairman; R. J. Armstrong M.D., Kalamazoo; James D. Fryfogle, M.D., Detroit; C. K. Hasley, M.D., Detroit; D. H. Kaump, M.D., Detroit; R. F. Kernkamp, M.D., Detroit; O. M. Randall, M.D., Lansing; D. C. Somers, M.D., Royal Oak; C. E. Toshach M.D., Saginaw; George Van Rhee, M.D., Port Huron; Frank Van Schoick, M.D., Jackson and F. P. Walsh, M.D., Detroit.
- **Committee on Use of the Word "Clinic,"** as per resolution No. 19 of 1956 House of Delegates Council Chairman Wiley appointed the following committee: J. E. Livesay, M.D., Flint Chairman; Robert E. Rice, M.D., Greenville and A. E. Schiller, M.D., Detroit.
- **Committee on Michigan Medical Service** Council Chairman Wiley appointed the following committee: G. W. Slagle, M.D., Battle Creek, Chairman; J. F. Beer, M.D., St. Clair; E. F. Sladek, M.D., Traverse City; D. W. Thorup, M.D., Benton Harbor; Arch Walls M.D., Detroit; and Wilfrid Haughey, M.D.

(Continued on Page 146)

NEW

for your Rheumatoid Arthritis patient

for the objective symptoms
for the subjective distress

the first
and only
ataraxic-
corticoid

Ataraxoid^{*}

prednisolone and hydroxyzine

provides the anti-rheumatic,
anti-inflammatory action of the most
effective steroid, STERANE,[®] complemented by
the superior central tranquilizing effects of
ATARAX.[®] Minimal disturbance of fluid and
electrolyte metabolism; no mental fogging
or major toxicity in ataractic action.

FOR UNMATCHED RESPONSE AND
MANAGEMENT IN RHEUMATOID ARTHRITIS...
AS IN OTHER COLLAGEN DISEASES, BRONCHIAL
ASTHMA, INFLAMMATORY DERMATOSES.

Supplied: Each green, scored
ATARAXOID Tablet contains 5 mg. prednisolone
(STERANE) and 10 mg. hydroxyzine hydro-
chloride (ATARAX). Bottles of 30 and 100.

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HIGHLIGHTS OF THE COUNCIL

(Continued from Page 144)

Battle Creek, and L. Fernald Foster, M.D., Bay City, as Advisors.

- **Committee to Study Comprehensive Pre-Paid Medical Care Insurance Plans** (as per resolutions No. 1-32 of 1956 MSMS House of Delegates): Speaker K. H. Johnson, M.D., appointed the following committee: C. I. Owen, M.D., Detroit, Chairman; J. F. Beer, M.D., St. Clair; K. E. Fellows, M.D., Grand Rapids; J. E. Hauser, M.D., Detroit; H. C. Hill, M.D., Howell; E. G. M. Krieg, M.D., Detroit; M. L. Lichter, M.D., Detroit, and K. H. Johnson, M.D., Lansing (Ex Officio).
- **Report on AMA Delegates Meeting**, Seattle, November, 1956, was reported by Chairman William A. Hyland, M.D., Grand Rapids.
- **A Councilor's letter**, published periodically in the Muskegon County Medical Society Bulletin, by William M. LeFevre, M.D., Councilor of the Eleventh District, was given commendation and referred to JMSMS Editor Haughey for publication.
- **Leon DeVel, M.D.**, Grand Rapids, for eight years MSMS Rheumatic Fever Control Coordinator, presented his resignation which was accepted with sincere regret. A vote of appreciation for Dr. DeVel's valuable services in this pioneering work was placed on the Executive Committee minutes.
- **Public Relations Counsel's report** included information on legislation; "Be Safe at Home" pamphlet; Diabetes Detection Week activities; Michigan Rural Health Conference program; documentation of Wayne County Medical Society's new building groundbreaking ceremony.
- **Committee reports:** The following were reviewed: (a) Arbitration Committee, meetings of November 9 and 23; (b) Maternal Health Committee, November 14; (c) Committee on Scientific Work, November 16; (d) Liaison Committee with the University of Michigan, November 19; (e) Liaison Committee with Labor, November 21; (f) Mental Health Committee, meeting of December 5; (g) Committee on "Big Look," December 11; (h) Meeting to arrange conference for residents, interns, senior medical students, December 5; (i) Rheumatic Fever Control Committee, December 5; and (j) Committee on Prevention of Highway Accidents, December 6.
- **Matters of mutual interest** were discussed with State Health Commissioner A. E. Heustis, M.D., including poliomyelitis vaccine and diphtheria incidence in Detroit. (On these subjects, the motion of the Executive Committee was: "That the MSMS communicate with each county medical society urging that their members get behind the poliomyelitis and diphtheria im-

munization programs by personal participation, television, bulletins, office cards and through every other means of publicity and communication.") Also discussed were recommendations of the Governor's Public Health Study Commission and nursing home licensure. Dr. Heustis was thanked for his excellent report and for his hospitality to the members of the Executive Committee on this occasion.

DETROIT LEADS IN 1956 ANNUAL SESSION ATTENDANCE

At the September, 1956, Michigan State Medical Society Annual Session in Detroit, 1101 Detroit physicians were registered out of a total of 2,564 in attendance. Flint came in second with 126 and Lansing third with seventy-two. Pontiac sent seventy M.D. representatives; Saginaw sixty-eight; Ann Arbor sixty, and Grand Rapids fifty-eight.

Ninety-nine M.D.'s came from without Michigan—with twenty-nine from varied points in Ontario.

Two hundred and thirteen separate communities in Michigan were represented at the annual session. Monroe County sent the greatest percentage of its membership to the annual session: 63 per cent.

Sixteen specialties were represented with the generalists leading with a registration of 705. Surgery had a total of 307 M.D.'s present with Medicine coming in third with 228.

Other sections were represented as follows: Pediatrics, 104; Obstetrics and Gynecology 101; Ophthalmology and Otolaryngology, 106; Urology, 54; Pathology, 51; Public Health, 45; Radiology, 43; Anesthesiology, 34; Gastroenterology-Proctology, 33; Occupational Health, 32; Dermatology-Syphilology, 31.

Residents and interns chalked up a total of 338.

CAMP FOR DIABETIC CHILDREN

Report of the Camp Committee,
Michigan Diabetes Association

In August, 1955, the Michigan Diabetes Association sponsored for the first time a camp for diabetic children. The venture was so successful that it was repeated in 1956.

From August 12 to August 25 of this year, fifty diabetic children were able to enjoy camping experience with no medical mishaps. They were supervised by two doctors, three nurses and two dieticians, as well as twelve counselors. The camp was held at the Tau Beta Camp in Columbiaville, Michigan. There are available at that site one hundred acres of land, a lake and multiple camp crafts and activities.

With fifty campers there were only two illness

(Continued on Page 148)

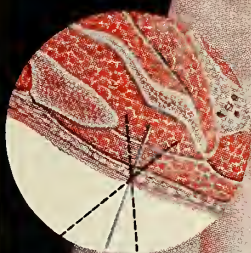
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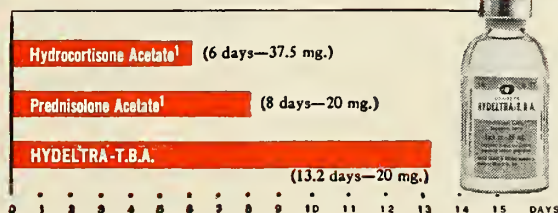
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Anti-inflammatory
effect lasts longer
than that provided
by any other
steroid ester



Dosage: the usual intra-articular, intra-bursal or soft tissue dose ranges from 20 to 30 mg. depending on location and extent of pathology.

Supplied: Suspension 'HYDELTRA'-T.B.A.—20 mg./cc. of prednisolone tertiary-butylacetate, in 5-cc. vials.



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¹ Hollander, J. L., Paper read at conference in New York City, May 31 and June 1, 1955

CAMP FOR DIABETIC CHILDREN

(Continued from Page 146)

cases. One was that of a girl who presented a problem not because of her diabetes but because of the complication of epilepsy. The other case was that of a girl who was in acidosis on admission and had to be treated with intravenous fluids, but was able to stay throughout the whole season.

The medical management of these children was simply but efficiently arranged. Each child as well as each of two adult diabetics who were present had a number. Their meal trays, urines, dining room seats and activities all bore the same number. When the meals were served, the dietitian had a card with all the numbers and the number of servings of the different food groups for each of these numbers. In this manner, the meals could be served rapidly and easily. Each counselor was responsible for a limited number of campers and always picked up their trays at meal time from a serving table where each tray was placed upon an area bearing its number. A master book was also kept with a daily record of each child with his number, a list of any reactions, the urine sugars, and the insulin dose for that day. At the end of the day, Doctor Shulman, the medical director, Doctor Cantor, his assistant, the camp director, the nurses, the counselors and the dieticians meet to discuss and to decide upon the activities for the following day and the insulin dose for each child. Supplementary feedings were routinely given to all children after strenuous activities, and rounds were made at intervals during the evening and at night to detect and treat any insulin reaction.

Last year, a Christmas reunion party was held for the children who had attended the camp. Another party will be given again this year.

The Michigan Diabetes Association is planning on continuing the Diabetic Camp for children each year. Applications for the camp may be directed to the Secretary of the Society, Miss Mary Harrington, Michigan Diabetes Association, 3825 Brush Street, Detroit 1, Michigan.

GRANTS FOR EDUCATION

Within the month two outstanding announcements have been made with reference to furthering education in Michigan. The Ford Foundation and the Ford Motor Company gave to the University of Michigan the Fair Haven estate of the senior Henry Ford at Dearborn, and considerations estimated to be of about \$6,500,000, to establish a branch of the University of Michigan in Dearborn. Especial emphasis is made on education in engineering in addition the regular collegiate subjects. No gift for education ever made has been of more tremendous scope and size.

The first week of January, 1957, Mrs. Wilson,

the widow of the late John F. Dodge, creator of the Dodge automobile, made a donation to the Michigan State University. She gave her Meadowbrook estate in Oakland County and a cash stipend to accomplish her intent of establishing in Oakland County a branch of the Michigan State University. Her interest is also in engineering. The total amount is estimated to be about ten million dollars. The University has announced the probable opening of this school in 1958. Mrs. Wilson formerly served on the Michigan Agricultural Board and the Administrative Board of Michigan State University.

MORE RESOLUTIONS

APPROVED BY THE 1956 MSMS HOUSE OF DELEGATES

1. RESOLUTION RE ESTABLISHMENT OF DEPARTMENTS OF GENERAL PRACTICE IN MEDICAL SCHOOLS

Whereas, there has been a declining proportion of medical graduates going into general practice, and

Whereas, the medical student is not now exposed to the various requirements of general practice because of the fact that all his instructors are those limiting their practice to the various specialties, and

Whereas, the modern generalist requires training in the art of medicine as well as the scientific approach, more knowledge of preventive medicine, physiotherapy, family counseling, medical and social economics and public relations in general, and

Whereas, the House of Delegates of the American Medical Association has passed a resolution requesting that medical schools add a Department of General Practice to their curriculum; therefore be it

RESOLVED, That the House of Delegates of the Michigan State Medical Society request the University of Michigan and the Wayne State University Medical College to add a Department of General Practice to their curriculum.

* * *

2. RESOLUTION RE EQUAL HEALTH OPPORTUNITIES FOR ALL

Whereas, the health opportunities of the community are our basic concern, and

Whereas, restriction or denial of health services and facilities because of race, creed or color violates the spirit of our ethical code; therefore be it

RESOLVED, That the Michigan State Medical Society record itself as favoring equal health opportunities for all.

* * *

3. RESOLUTION RE COMMITTEE TO STUDY USE OF WORD "CLINIC"

Whereas, during the last decade we have seen many changes in medical practice, such as the growth of groups, partnerships, clinics and medical centers, and

Whereas, this growth and grouping of medical resources is natural and good, and in most instances results in better medical service for the public, and

(Continued on Page 164)



charleyhorse!

The pain Dad feels now is the beginning of tenosynovitis. With adequate early treatment he'll be able to stay on his job. Delaying therapy might result in the development of effusion and, later, calcification of ligaments or even periarthrititis with severe pain and serious restriction of movement.

Immediate antirheumatic therapy is to be encouraged in the treatment of tenosynovitis, as it should be in the majority of other common rheumatic disorders, to alleviate pain and prevent progression of the disturbance to a point of irreversible damage.

SIGMAGEN provides doubly protective corticoid-salicylate therapy—a combination of METICORTEN® (prednisone) and acetylsalicylic acid giving additive anti-rheumatic benefit as well as rapid analgesic effect. These benefits are supported by aluminum hydroxide to counteract excess gastric acidity and by ascorbic acid, the vitamin closely linked to adrenocortical function, to help meet the increased need for this vitamin during stress situations.

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AMA Washington Letter

THE MONTH IN WASHINGTON

The broad issue of federal construction grants for medical schools pending before the 85th Congress raises again a major question: To what extent is there a physician shortage in the United States?

The administration, through Secretary Folsom, maintains that the need for more doctors and research scientists is increasing rapidly as the population rises, as medical science grows more complex and as research programs are greatly expanded. And, he adds, the need undoubtedly will continue to increase in the years ahead.

Many of these schools already are in a critical financial plight, Mr. Folsom argues, and they need increased private and public funds "just to meet regular operating expenses." Under these circumstances, without further aid, "many schools face almost impossible obstacles in raising funds for construction of new classrooms, laboratories and other facilities." The Secretary then sounds this warning:

"Unless effective action is taken now toward providing these facilities, the shortage of medical scientists will grow much more acute in the years ahead, and the health of the American people will be retarded."

To solve this problem, the administration wants to broaden the program enacted last year for \$30 million a year for three years to help build and equip laboratories doing research in various diseases. It asked the last Congress for \$50 million a year for five years for both research labs and teaching facilities. The legislators only granted the \$30-million-a-year part. That, says the administration, is not enough.

And to bolster that contention, Mr. Folsom cites the record on the laboratory facilities act: within three months after authorization, requests totalling well over \$100 million were received by the Public Health Service.

But when the committees of Congress—in all likelihood starting with the House Interstate and Foreign Commerce group—launch their hearings, members will want to know just how short the country is of doctors and whether reports of shortages take into account the increased productivity of each physician in the light of new techniques and other medical advances.

On the opening day of the 85th Congress, health legislation emerged as a popular subject. Of the approximately 2,000 bills, resolutions and private measures introduced that day, seventy were marked for study by the Washington Office of

the American Medical Association. Experience has shown that about 3 per cent of all measures are of medical importance.

Many of the bills were duplicates of those in the last Congress, while others were revised versions of old favorites. In the latter category were the Jenkins-Keogh bills (again bearing the numbers (H.R. 9 and H.R. 10) which would provide tax deferment on money paid in annuity plans, and the Bricker Amendment for keeping international treaties from affecting internal laws of the United States.

The tax deferment proposal was changed in several respects, the most important being a provision for withdrawal of money from plans in advance of age sixty-five, upon payment of a tax penalty. The key section in the proposed constitutional amendment sponsored by the Ohio Senator states that "A provision of a treaty or other international agreement not made in pursuance of this Constitution shall have no force or effect."

One of the few surprises in the opening day rush to the bill hoppers was a bill by Rep. Poage (D., Tex.) to authorize the Secretary of HEW to make long-term, 3 per cent interest loans to nonprofit hospitals for construction and expansion of facilities, including nurses homes. Certain sectarian groups have been pressing for just such a plan in lieu of taking federal grant money under the Hill-Burton program.

Moving to fill two major spots in the Department of HEW, President Eisenhower has named as Assistant Secretary, thirty-six-year-old Elliot L. Richardson, a Boston lawyer and son of the late Dr. Edward P. Richardson of Massachusetts General Hospital and Harvard Medical School. Mr. Richardson served at one time as law clerk to Judge Learned Hand and Justice Felix Frankfurter, as assistant to Senator Saltonstall and as consultant to former Governor Christian Herter, now Under-Secretary of State.

To succeed Dr. Lowell T. Coggeshall as special assistant for health and medical affairs, the President appointed Dr. Aims C. McGuinness, a Philadelphia pediatrician, who was last in Washington as a clinical consultant to the United Mine Workers' Welfare and Retirement Fund. He was responsible for the medical staffing of the Fund's ten memorial hospitals in three mining states. Dr. McGuinness was dean of the University of Pennsylvania Graduate School of Medicine and one-time director of Children's Hospital of Philadelphia.

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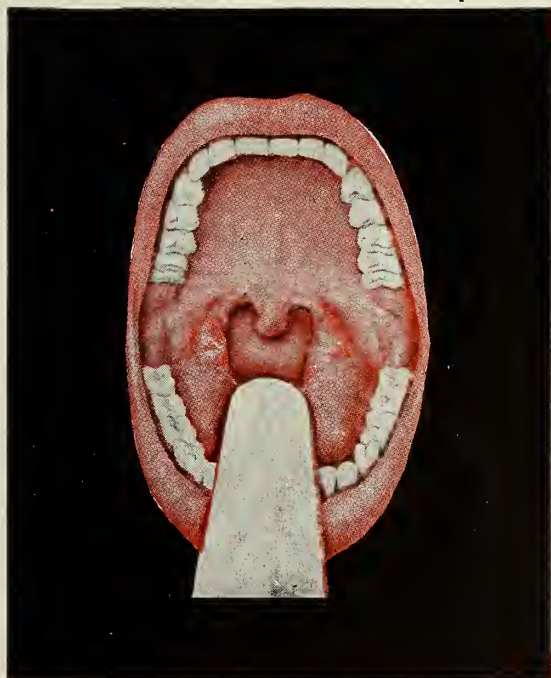
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"...effective...in the treatment of a variety of infections seen regularly by the practicing clinician..." including pharyngitis, bronchitis and other respiratory infections

and "... often useful in the treatment of infections due to staphylococci resistant to one or several of the regularly used antibiotics"

"side effects . . . [are] notable by their absence"¹

1. Carter, C. H., and Maley, M. C.: Antibiotics Annual 1956-1957, New York, Medical Encyclopedia, Inc., 1957, p. 51.

AMA News Notes

AMA RURAL HEALTH "DERBY" MARCH 7-9

The Blue Grass country of Louisville, Kentucky, will be the scene of the American Medical Association's rural health "derby" March 7-9. Sponsored by the Council on Rural Health, this Twelfth National Conference on Rural Health will be held at the Brown Hotel. It will feature discussions on various problems of rural health and medical care. Built around the theme of "Together We Build," the Conference will open with greetings from the Honorable A. B. Chandler, governor of Kentucky, the Honorable J. Andrew Broaddus, mayor of Louisville, and Dr. George F. Lull, AMA secretary-general manager. Also scheduled to speak Thursday morning, March 7, are Dr. F. S. Crockett, Council chairman; Dr. Austin Smith, AMA Journal editor, and Dr. Julius Michaelson, chairman, Alabama State Medical Association committee on medical service and public relations.

Problems of medical education will be outlined during the afternoon session by Dr. Edward Turner, secretary, AMA Council on Medical Education; Dr. J. Murray Kinsman, dean of medicine at the University of Louisville; Dr. Charles Bush, resident physician planning to enter rural practice in Kirkland, Ind., and Dr. W. Wyan Washburn, chairman, North Carolina State Medical Society committee on rural health and education.

The Friday program will cover the economics of agriculture and medical and hospital care costs and health and medical care problems of farm laborers and migrant workers. Speakers include Carroll Bottom, Purdue University economist; Mary Schabinger, Detwiler Memorial Hospital, Wauseon, Ohio, and Dr. Carl S. Mundy, Council vice-chairman. Principal speaker at the Friday evening banquet will be Dr. Leroy Burney, surgeon general, U. S. Public Health Service, Washington, D. C.

Other highlights of the Conference include discussions on rural-urban problems and rural aspects of the problems of the aging. At the final session on Saturday morning, Joseph Ackerman, managing director, Farm Foundation, will give a brief résumé on the Conference, and Mrs. Charles W. Sewell, Council advisory committee member, will give an inspirational talk entitled "And Away We Go."

AMA TO SURVEY COUNTY MEDICAL SOCIETIES

Questionnaires to determine the scope of activity in various areas—including public education, community service, society projects, meetings, personnel, and finances—will be distributed early this year by the American Medical Association to

all county medical societies. This fifth biennial survey of county medical society activities is being undertaken by the Council on Medical Service and the Department of Public Relations with the assistance of other AMA departments. More than 1,200 county societies supplied information for the 1955 survey, and it is hoped that an even larger number will complete the 1957 questionnaire.

AMA STUDIES MEDICAL CARE PAYMENTS FOR INDIGENTS

A number of amendments which provide a new method of financing medical care for indigent persons receiving state public assistance aid were passed by the 1956 Congress. The AMA Council on Medical Service's Committee on Indigent Care has studied the changes these amendments make in state and local indigent care plans and prepared a question-and-answer survey for distribution to state medical societies. The Committee's "guides" for indigent care plans also have been brought up to date for state society use.

After July 1, 1957, the federal government will reimburse the states on a 50-50 basis for medical care expenditures. The federal Bureau of Public Assistance pays half the amount expended in any program which meets its standards, up to an average of six dollars per month for adults and three dollars per month for children. The Bureau is attempting to encourage expansion of the medical care benefits available after July 1, when the new system of financing takes effect.

The program involved in this new plan include the federally-aided Aid to the Blind, Aid to Dependent Children, Old Age Assistance, and Aid to the Permanently and Totally Disabled. These public assistance programs are organized and administered by the states—the federal government participates only in the financing.

Any questions regarding the new plan should be referred to John F. Burton, M.D., committee chairman, at AMA Headquarters, Chicago.

AMA PUBLISHES NEW GUIDEBOOK ON MATERNAL DEATH STUDIES

A new "Guide for Maternal Death Studies" will be made available through the American Medical Association's Council on Medical Service for distribution to state and county medical societies interested in developing similar studies. The publication will include—in addition to the guides—a description of seven maternal death study committees now in operation, sample forms, material showing how the results of these studies are being used in postgraduate education, and a

(Continued on Page 199)

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American Medical Association

Report of the House of Delegates

TENTH CLINICAL MEETING

November 27-30, 1956, Seattle, Washington

By Wm. A. Hyland, M.D.,

Grand Rapids, Michigan

Chairman of Michigan Delegation

Medical ethics, veterans' medical care, radioactive isotopes, continuance of the American Medical Association interim session, hospitalization for patients with alcoholism and a report of the Committee on Medical Practices were among the wide variety of subjects acted upon by the House of Delegates at the American Medical Association's Tenth Clinical Meeting held November 27-30 in Seattle.

Dr. Edward M. Gans of Harlowton, Montana, was announced at the opening session Tuesday as the 1956 General Practitioner of the Year. Dr. Gans, who is eighty years old, has practiced medicine for fifty-one years and has been in the Harlowton area for the past forty-four years.

Strongly condemning government intervention in medicine, Dr. Dwight H. Murray of Napa, California, American Medical Association President, told the opening session that "the medical profession, along with business and industry, is caught between those who desire even more intensely to perpetuate party politics. Unfortunately, in recent years a benevolent federal government appears more attractive to the voting public than the preservation of individual freedoms. Medicine must do its utmost to reverse this trend."

Total registration at the end of the meeting, was 6,282 including 2,813 practicing physicians and 3,813 residents, interns, medical students, nurses and guests.

Medical Ethics

Subject of greatest interest at Seattle was the proposed, ten-section revision of the Principles of Medical Ethics originally submitted at the June, 1956, Annual Meeting in Chicago, where final action was deferred until the Seattle session. The proposed short version of the Principles was re-submitted with some changes based on suggestions received since last June by the Council on Constitution and By-Laws. The House of Delegates, however, decided to refer the matter back to the Council on Constitution and By-Laws for further study and consideration. The reference committee report adopted by the House included the following statements:

Careful consideration was given to the Preamble and the ten sections of the proposed Principles. The Pre-

amble and seven of the ten sections appear to be acceptable in their present form.

Sections 6 and 7 were not acceptable as presented either to the group which appeared at the hearing or to your reference committee.

Out of the general discussion the reference committee received the crystallized opinion that at least four areas needed more specific attention in Sections 6 and 7. These are: 1) Division of fees; 2) the dispensing of drugs and appliances; 3) the corporate practice of medicine; and 4) greater emphasis concerning the relationship between physicians and patients.

In addition, the reference committee felt that the wording in Section 10 could be improved if amended to read as follows:

"the responsibilities of the physician extend not only to the individual but also to society and deserve his interest and participation in activities which have as their objective the improvement of the health and welfare of the individual and the community."

In view of the above your reference committee believes that the proposed Principles of Medical Ethics should be referred back to the Council on Constitution and By-Laws for further study and consideration of the above stated principles.

In the short space of time at our disposal and in view of the importance of the subject, your reference committee did not deem it wise to attempt to properly phrase these concepts.

We would also recommend that if possible this study be completed at least six weeks prior to the June session and that the new version be published in *THE JOURNAL* in order that all interested physicians might have an opportunity to comment thereon."

Veterans' Medical Care

The House revised American Medical Association policy on veterans' medical care by endorsing in principle the following paragraph suggested by the Council on Medical Service:

With respect to the provision of Medical care and hospitalization benefits for veterans in Veterans Administration and other federal hospitals that new legislation be enacted limiting such care to veterans with peacetime or wartime service whose disabilities or diseases are service-incurred or aggravated.

(Continued on Page 158)

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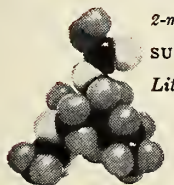
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(Continued from Page 156)

This action eliminates the temporary exceptions which were made in the June, 1953, policy regarding wartime veterans who are unable to defray the expenses of necessary hospitalization for non-service-connected cases of tuberculosis or psychiatric or neurological disorders. In making the policy change, the House approved this supplementary statement:

We recognize the laws and administrative extensions of the law that are now in operation. We feel that under the circumstances it will be to the best interests of the public in general, and veterans in particular, if medical societies, county and state as well as national, develop committees to assist in guaranteeing VA hospital admission to service-connected cases. While the present law exists, we should help assure that veterans whose illness constitutes economic disaster will not be displaced by those suffering short-term remediable ills which, at the worst, constitute financial inconvenience.

In another action concerning veterans, the House passed two resolutions condemning as unlawful the practice of Veterans Administration hospitals which admit patients who are covered by workman's compensation insurance or by private health insurance and which render bills for the cost of their care. Both resolutions requested the American Medical Association to take action to bring about a discontinuance of such practices by VA Hospitals, and one of them instructed the Association Secretary to obtain from each state testimony or records of each known case that violates VA Reg. 6047-D1.

Military Dependents (Medicare)

The House recognized the assistance that the American Medical Association has given to the government and state societies in negotiating contracts for medical care of the military dependents and urged that this guidance be continued in the future. It was also emphasized that the medical profession must make every effort to carry out successfully this liberal program, for it will be used as a yardstick in future plans that may come up before Congress.

Social Security

Attention was called to Public Law 880, which provides cash benefits for total and permanently disabled persons. Since administrative regulations have not yet been developed, the House asked the Board of Trustees to consider the establishment of a regulation to provide that the findings of the physician making the original examination be forwarded to a rotating committee of physicians appointed by county society for review and final report.

Attention was also called to another amend-

ment to the Social Security act which provides for federal funds on a matching basis for medical care for groups in the welfare program; it was recommended that state societies develop machinery for handling this program.

Radioactive Isotopes

The House rescinded the June, 1951, action, which limited the hospital use of radium and radioactive isotopes to board-certified radiologists, by approving a new policy statement which says:

1. In any hospital in which a patient is to receive radium or the products of radium or artificially produced isotopes, there should be a duly appointed Committee on Radium and Artificially Produced Radioisotopes of the hospital professional staff. This committee should include, but not necessarily be limited to, the following qualified physicians: a radiologist, a surgeon, an internist, a gynecologist, a urologist and a pathologist. This committee should have available such competent consultation of other physicians and scientific personnel as may be required by it. Where this is not practicable, the Hospital staff should consult the nearest Committee on Radium and Artificially Produced Radioisotopes.

2. In any hospital, the use of radium or its products and artificially produced radioactive isotopes for diagnostic or therapeutic purposes shall be restricted to qualified physicians so judged by the Committee on Radium and Artificially Produced Radioisotopes of the professional staff to be adequately trained and competent in their particular use.

3. It is recommended that procurement, storage, dosimetry control and inventory of all radioactive isotopes for the use of the hospital staff and radiological safety control be centralized, and, where administratively possible, centralization be located in the Department of Radiology.

4. It is recommended that the Board of Trustees assign to the appropriate council or committee the continuous study of the problems of radiological safety control in the use of radium and its products and artificially produced radioactive isotope for diagnostic or therapeutic purposes.

Civil Service Employees

view of the continued expansion in the field of medical care, as evidenced by the above new laws, the report on medical care for Civil Service Employees was referred back for further study and report. The report had expressed the opinion that no action was needed for this problem.

Guides

The House approved the "Guides for Medical Societies in Developing Plans for Tax-Supported Personal Health Services for the Needy." Because of the new Social Security amendments, it was believed these Guides would be helpful to the state societies.

(Continued on Page 160)



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*Introduced—July, 1954

(Continued from Page 158)

Medical Education and Hospital

Apparently the Council on Medical Education and Hospitals and the Joint Commission on Accreditation of Hospitals have carried out successfully the programs and mandates of the House of Delegates, for there were few resolutions and no controversy about the many subjects in this field. Council on Medical Educational and Hospitals:

The House reviewed and approved the report of the Council and urged each member to familiarize himself with the work of the Council on Medical Education on the undergraduate level, with specialty groups, and in graduate medical education. It noted with favor the increased interest in postgraduate education for the practicing physician. Approval was also given to the revisions to the Essentials of Approved Residencies and Fellowships, which involve preventive medicine and radiology.

Committee on Medical Practices: The delegates accepted the report from this special committee, which contained several recommendations:

1. That work be deferred on the relative value scale.
2. That the American Medical Association Public Relations Department continue its present educational program to increase appreciation of non-surgical work.
3. That a study committee be appointed to analyze the best background preparation today for general practice.
4. That the previous directive be revised to read: "The American Medical Association representatives of the Joint Commission of Hospital Accreditation be instructed to stimulate action by that body leading to the warning, provisional accreditation, or removal of accreditation of community or general hospitals which exclude or arbitrarily restrict hospital privileges for generalists as a class regardless of their individual professional competence where such policies adversely affect the quality of patient care rendered. Any action taken should be only after appeal to the Commission by the county medical society concerned."

The report also deplors that "segments of the medical profession make sweeping and inaccurate statements for public consumption without prior consultation with other interested and informed groups."

Clinical Meetings

Rejecting a resolution which recommended discontinuance of the interim sessions, or clinical meetings, the House adopted a reference committee report which said:

We believe that the interim sessions should be continued because of the public relations value of these meetings to the Association and the educational value to physicians and the general public in the various geographical areas involved.

It is the suggestion of the reference committee that

maximum attention be given to these potential benefits in selecting for the interim meeting.

It is our further recommendation that the Board of Trustees consider the advisability of holding an Interim Scientific Session in November or December of each year in different parts of the United States. The reference committee suggests that the views of the Board of Trustees in this regard be reported to the House of Delegates next June.

Hospitals

The House took the following action on subjects pertaining to hospitals. They endorsed the activities initiated by the American Hospital Association and American Institute of Architects to carry on a research project financed by a governmental grant on hospital design and construction and recommended that the American Medical Association join in the proposed study.

Hospitalization for Alcoholics

To implement educational approaches to the problem of alcoholism, the House approved a statement submitted through the Board of Trustees by the Council on Mental Health and its Committee on Alcoholism. The House also recommended that the statement be brought to the attention of the Council on Medical Education and Hospitals, the Joint Commission on Accreditation of Hospitals and the American Hospital Association. It includes the following:

The Council on Mental Health urges hospital administrators and the staffs of hospitals to look upon alcoholism as a medical problem and to admit patients who are alcoholics to their hospitals for treatment, such admission to be made after due examination, investigation and consideration of the individual patient. Chronic alcoholism should not be considered as an illness which bars admission to a hospital, but rather as qualification for admission when the patient requests such admission and is co-operative, and the attending physician's opinion and that of hospital personnel should be considered. The chronic alcoholic in an acute phase can be, and often is, a medical emergency.

Committee on Medical Practices

In approving a progress report of the Committee on Medical Practices, the House amended one of its directives to read as follows in order to remove any legal objections:

The American Medical Association representatives of the Joint Commission on Accreditation of Hospitals be instructed to stimulate action by that body leading to the warning, provisional accreditation, or removal of accreditation of community or general hospitals which exclude or arbitrarily restrict hospital privileges for generalists as a class regardless of their individual professional competence where such policies adversely affect

(Continued on Page 162)

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(Continued from Page 160)

the quality of patient care rendered. Any action taken should be only after appeal to the Commission by the county medical society concerned.

The House also approved a recommendation by the Committee on Medical Practices that a study group be formed to consider the best background preparations for general practice, and it urged that such action be implemented as soon as practicable.

Miscellaneous Actions

Among many other actions on a wide variety of subjects, the House of Delegates also:

Urged the widest possible publication and distribution of Dr. Murray's presidential address at the opening session;

Pledged the full support of the Association's initiative and energy to President Eisenhower's people-to-people program as a means of promoting understanding, peace and progress;

Directed the Board of Trustees to continue its investigation of the practicability of developing a statement of American Medical Association policies and to arrange for the periodic publication of revised versions of such a policy statement;

Commended the objectives of the American Association of Medical Assistants and its sincere desire to work closely with the medical profession in improving medical service and medical public relations;

Noted with pride the good work being done by the 75,000 members of the Woman's Auxiliary;

Directed the Councils on Pharmacy and Chemistry and on Foods and Nutrition to conduct a joint study of all presently available information concerning the fluoridation of public water supplies and to present a documented report of findings and recommendations at the December, 1957, meeting;

Urged all physicians to participate actively in the formulation of medical policy for prepaid medical care plans which are under physician direction or sponsorship;

Changed the By-laws to extend service membership to reserve officers on extended active duty

with the defense forces and the U. S. Public Health Service;

Changed the By-laws relating to transfer of membership so that an active or associate member of the Association who moves his practice to another jurisdiction may continue his American Medical Association membership by applying for membership in the constituent association in his new jurisdiction, subject to a two-year limit on approval of his application;

Changed the By-laws so that the election of officers may take place at any time on the fourth day of the annual session, instead of being restricted to the afternoon of that day;

Passed a resolution calling for the American Medical Association to join with the American Hospital Association and the American Institute of Architects in their proposed study of hospital design and construction;

Approved the principle of voluntary reduction in the self-assigned quota of interns as printed in the 1956 handbook of the National Intern Matching Program, and;

Instructed the Board of Trustees to accentuate cooperation between the American Medical Association and the American Bar Association to the end that a bill of the Jenkins-Keogh type be enacted at the next session of Congress.

Scientific Exhibits

Several groups from Michigan had worthy exhibits at this meeting: "Oral Phenoxymethyl Penicillin in the Treatment of Bacterial Endocarditis," by E. L. Quinn, J. L. Colville, Frank Cox, Jr., and Joseph Truant, Henry Ford Hospital, Detroit; "Diagnosis and Treatment of Non-Otosclerotic Middle Ear Deafness," by H. G. Kobrak, Geraldine Purcell and Eduard Domeier, Detroit; "Current Status of Intravenous Cholecystography and Cholangiography," by J. Edward Berk, Howard Feigelson Sinai Hospital and Wayne State University, Detroit; "Hemorrhage and Hypofibrinogenemia: Clinical and Experimental Studies," by C. Paul Hodgkinson, Paul W. Pifer, Melvin A. Block and Donald G. Remp, Henry Ford Hospital, Detroit; "Ectylurea, A New Calmative for the Relief of Anxiety and Tension States," by John T. Ferguson and Frank V. Z. Linn, Traverse City State Hospital, Traverse City.

MEDICAL MEETINGS AND CLINIC DAYS

A list of known medical meetings and clinic days, sponsored by county medical societies and other physician groups in Michigan, follows:

1957

March 13-15

Spring

April 17

May 5-10

Michigan Clinical Institute, Sheraton-Cadillac Hotel

MSMS Postgraduate Extramural Courses

Genesee County Medical Society, Twelfth Annual Cancer Day

Sixth International Congress of Otolaryngology

Detroit

Statewide

Flint

Washington, D. C.



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Adult or juvenile, your patients with sore throats will welcome a course of **HYDROZETS**. These newest Merck Sharp & Dohme troches offer anti-inflammatory, anti-infective and analgesic properties that promptly alleviate distressing mouth or throat irritation whether caused by infection, mechanical injury or allergic reaction. And **HYDROZETS** taste so good, it's hard to believe they're medicine.

Formula: Each **HYDROZETS** Troche contains—2.5 mg. 'HYDROCORTONE' to reduce pain, heat and swelling; 50 units Zinc Bacitracin, 1 mg. Tyrothricin and 5 mg. Neomycin Sulfate to combat gram-positive and gram-negative bacteria; and 5 mg. Benzocaine for rapid soothing analgesia.

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J. R. BRUCE, JOURNAL OF MSMS PUBLISHER, DIES



J. R. Bruce, 81, of St. Paul, founder and chairman of the Board of the Bruce Publishing Company—long-time publisher of THE JOURNAL of the Michigan State Medical Society—died in late December.

Mr. Bruce founded his publishing and advertising company in 1912 with the Northwestern Druggist as his first publication. At the time of his death his company had fifty-two publications on its list, including the JOURNAL OF THE MICHIGAN STATE MEDICAL SOCIETY.

Mr. Bruce was born in Freedom, Kentucky, and came to St. Paul in 1903. He lived there continuously since. He retired as president of Bruce Publishing Company in 1946 to become Chairman of the Board.

Mr. Bruce is survived by his wife, Anna H. Rowan Bruce, one daughter, Mrs. W. G. Shepherd, and one son, J. Robert Bruce, Jr., (associated with Bruce Publishing Company) and six grandchildren.

The sympathy of the Editor and members of the Publication Committee of JMSMS have been extended to the wife and family of Mr. Bruce—a man who during more than a quarter of a century aided THE JOURNAL of the MICHIGAN STATE MEDICAL SOCIETY with constant advice, understanding, good will and outstanding service.

3. RESOLUTION RE COMMITTEE TO STUDY USE OF WORD "CLINIC"

(Continued from Page 148)

Whereas, the word "clinic" implies resources and facilities not usually found in a private physician's office, and

Whereas, there are rapidly becoming too many one- and two-physician clinics, which are unethical, misleading, false advertising, therefore be it

RESOLVED, That this House of Delegates of the Michigan State Medical Society request The Council to appoint a committee to study this situation and make recommendations to the House of Delegates for proper action.

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(Erythromycin, Abbott)

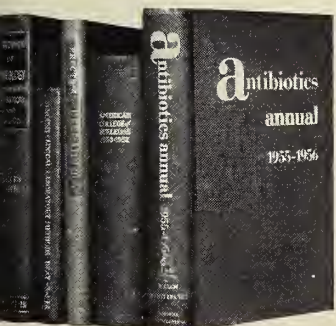
STEARATE

"No Serious Side Effects Occurred"

After a study of 171 patients treated with erythromycin, the investigator wrote: "No serious side effects occurred with prolonged therapy or with doses up to 8 Gm. per day in the severe infections."¹

Actually, ERYTHROCIN stands on a remarkable record of safety. After four years, there's not a single report of a severe or fatal reaction attributable to erythromycin. In addition, you'll find allergic manifestations rarely occur. *Filmtab* ERYTHROCIN Stearate (100 and 250 mg.), in bottles of 25 and 100. **Abbott**

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1. Romansky, M.J., et al., Antibiotics Annual 1955-1956, p. 48,
2. Waddington, W. S., Maple, F. C., and Kirby, W. M. M., A.M.A. Archives of Internal Medicine, 1954, p. 556.

PR REPORT

DR. PAYNE MOVES UP: DR. TEED TAKES OVER



R. W. Teed, M.D., took up the reins of the MSMS Public Relations Committee at the January 25 meeting in Detroit. Doctor Teed was appointed committee chairman in September to succeed C. Allen Payne, M.D., who was elected Councilor of the Fifth District by the 1956 House of Delegates.

Doctor Teed, an Ann Arbor ophthalmologist, has a consuming interest in medical public relations which began in 1947, his first year as a member of the newly created PR Committee. Since 1954 he has served as vice-chairman.

A believer in "preventive medicine," Doctor Teed felt that this could well be a new approach to public relations and thus he became a prime mover in the continuing program to insert the socio-economic "facts of life" in the training of medical students.

The experience which Doctor Teed brings to the committee stems from his service record on MSMS committees through the years, including: Medication (eight years), Scientific Radio, and Legislative Study.



C. Allen Payne, M.D., for the past four years chairman of the MSMS Public Relations Committee, also devoted a full ten years of service to improving the doctors' relations with their public. In his present capacity as Councilor, Doctor Payne may well draw upon his PR knowledge in matters of decision. A broad background in many areas of medical or-

ganization gives Doctor Payne an enviable scope of understanding. His decade of service to MSMS includes contribution to these committees: Cancer Control, Legislative Study, Michigan Cancer Coordinating, and Advisor to Woman's Auxiliary to MSMS and the State Medical Assistants Society.

BUSY DAYS are the rule in the MSMS these winter months as committees and staff swing into the crucial portion of the year's work.

The policies of the House of Delegates take

form in programs developed by dozens of committees and executed by The Council.

An active legislature considers budgets and projects of state health agencies and considers the policies of hundreds of organizations as they affect the welfare of the people. Material from legislative hearings flows to doctors on a hundred and one health matters. Liaison meetings with related organizations tumble over one another seeking a place on the crowded calendar of events. Conferences, big and small, are arranged, reported and their findings acted upon.

Work is evaluated and programs are revised to meet changing situations. A flood of communications to large groups and small—often on an emergency basis—tax the facilities and personnel available to MSMS.

Yes, these are busy days. But occasionally, through the fog of routine, things happen that deserve special cognizance. This month THE JOURNAL presents two films and two doctors that are important to the MSMS PR program.

"Something Called Epilepsy."—After nearly two years in the making, "Something Called Epilepsy," a new 16 mm. motion picture film in sound and color, will be ready for its premiere by the time you read this.

Produced by MSMS, this film departs from the strictly documentary approach used in most of the previous MSMS pictures. Instead, it incorporates a story line that will have appeal particularly to teen-agers and their parents.

Services of the Michigan Epilepsy Center were used in the filming, and the team approach to diagnosis advocated by the Center is effectively utilized in the story.

The basic theme of the picture is that epileptics can live in society happily if they—and the public at large—understand that "Something Called Epilepsy" is not a thing to be ashamed of, that cures can be effected, and that there is promise for a brighter future.

New Film Document.—A documentary motion picture, recording the transition of the Wayne County Medical Society from its present quarters to the New David Whitney House, was approved in December by the Executive Committee of The Council for presentation to Wayne doctors.

Shooting began on December 19 at groundbreaking ceremonies opposite the Medical Science Building on the College of Medicine campus of Wayne State University.

The complete film will have a running time of
(Continued on Page 170)



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ACHROCIDIN is particularly valuable in treating acute respiratory infections during epidemics or when questionable middle ear, pulmonary, nephritic, or rheumatic signs are present.

ACHROCIDIN offers early, potent therapy against such disabling complications as otitis media, sinusitis, bronchitis to which the patient may be highly vulnerable at this time.

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Adult dosage for ACHROCIDIN Tablets and new, caffeine-free ACHROCIDIN Syrup is two tablets or teaspoonfuls of syrup three or four times daily. Dosage for children according to weight and age.

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Each tablet contains:

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Tetracycline

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Salicylamide

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RHEUMATIC FEVER CO-ORDINATOR LEON DEVEL RESIGNS



After eight years of arduous and pioneering work in organizing and helping maintain the thirty rheumatic fever centers of the Michigan State Medical Society, Rheumatic Fever Control Coordinator Leon DeVel, M.D., of Grand Rapids resigned as of February 1, 1957, to assume a position with the Michigan Crippled Children Commission.

The excellent record established by Dr. DeVel was recognized by the MSMS Executive Committee of The Council which, at its December 12 meeting in Detroit, accepted the DeVel resignation "with very sincere regret." A note of appreciation was placed on the Executive Committee minutes for the the valuable service Dr. DeVel rendered during his eight years with the Society. The Executive Committee of The Council called Dr. DeVel's program "a most unique and progressive activity that has gained stimulation, momentum and nationwide attention through your good efforts. We all shall miss you and your effective work."

Good luck, Dr. DeVel, and all success in your new undertaking in behalf of rheumatic fever patients.

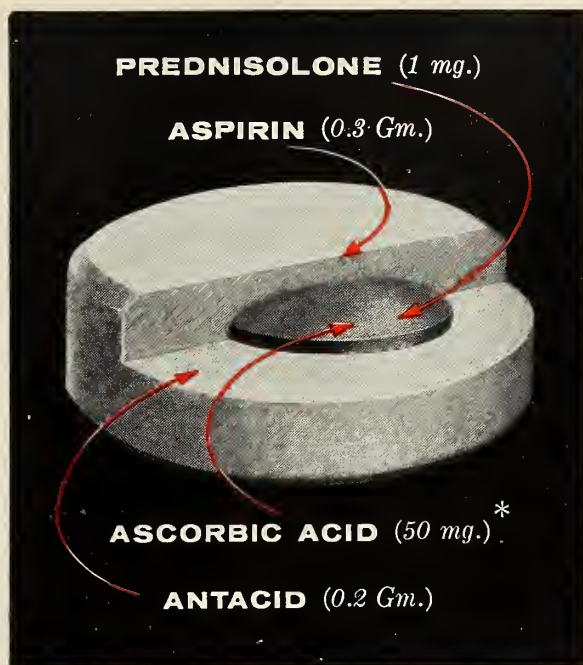
PR REPORT

(Continued from Page 168)

approximately ten minutes and its premiere is planned during the dedication celebration some eighteen months hence.

D. Bruce Wiley, M.D., Chairman, The Council, announced the film plans to civic and medical society dignitaries at the WCMS Groundbreaking Luncheon in December.

W. B. Harm, M.D., was appointed Chairman of a Special Project Film Committee to supervise and aid production of the motion picture. Other Wayne doctors invited to serve are: Louis Bailey, M.D., President-Elect; Luther Leader, M.D., President; A. E. Schiller, M.D., MSMS Councilor and Chairman, MSMS Sub-Committee on Radio, TV and Motion Pictures; and Warren Babcock, M.D., Ex officio Chairman, WCMS Building Committee.



Proper formula for treating "Rheumatism" patients



With TEMPOGEN, many patients obtain adequate relief from immobilizing "rheumatic" pain with lower hormone dosages than are ordinarily required, because of the enhanced antirheumatic effect provided by the prednisolone-salicylate combination. In addition, the likelihood of the occurrence of gastric distress or adrenal ascorbic acid depletion is minimized.

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Editorial Opinion

A SUGGESTION FOR MD'S

An innovation in the field of doctoring has been brought to our attention. We think so highly of the new procedure that we want to pass it *on* to our own doctors with the thought that the idea may be catching. It is, the applause from Mr. and Mrs. Citizen will resound.

In several cities here in the United States doctors are aware that the public must be served around the clock. This is an "old-fashioned" idea that went out the window for too many doctors of our generation. With exceptions, doctors today call it quits with sundown.

It is not the purpose of this editorial to argue the right or wrong of this practice. That there is an answer to the problem is our concern. We know that sickness does not wait upon the clock. It strikes at any hour—and at any hour we may need a doctor.

This perplexing problem is being solved in some cities today by establishing physicians expanding their organization to include one or more young doctors, perhaps just starting out in private practice. The office then publicly announces "Open twenty-four hours a day," with the young doctors holding down the office throughout the night.

Wherever this is being tried, public acceptance has been almost instant. Many of the older physicians in other offices have been only too happy to refer their night calls to the young doctors who are on duty all night.

If you have ever needed a doctor in the night for yourself or your family you will recognize the importance of knowing that someone is available. You may even want to suggest to your own family doctor that he investigate the merits of such a plan as we have described to be initiated in our own Downriver area. We are confident the public will voice wholehearted approval.—*Wyandotte News-Herald*, December 14, 1956.

TACTLESS HOSPITALS

Hospitals, including those in Michigan, probably have as poor public relations as any known group outside the Iron Curtain.

Why this should be so is not altogether clear to us, but it IS so.

It may be, as some hospital people have argued in the past, that being sick is one luxury nobody likes to pay for. When you are sick and need to go to the hospital you (and your relatives) are vociferous in demanding the best and "we don't care about the cost—give us the best."

After you are well, and the bill remains, your

wail rises to the unresponsive heavens, "Why does it cost so much?"

Since the advent of Blue Cross, the hospital bill no longer remains as a frightening shadow in the background. How to prepay the doctor's bill is a problem not wholly solved, but Blue Cross has made the hospital bill stop scaring us to death.

Yet hospital public relations remain bad. Even though Blue Cross is a nonprofit organization, certain groups grumble skilfully that Blue Cross shouldn't raise its rates—even though everybody else does.

The hospitals are given a free-hand walloping at any opportunity. We complain about the food, the service, the cost, the visiting hours, and about everything.

Since the hospitals, when you get right down to it, are doing a magnificent job of getting sick people well, the criticism isn't altogether warranted.

* * *

However, we do think the attitude of some hospital employes, and doubtless of some hospital executives, is haywire. The idea still seems to prevail that, when you are in the hospital, you'd better do as the rules say.

It's not yours to question why. Not yours to express a preference. Not yours to criticize anything. You do as you're told!

Some hospitals are beginning to break into a new kind of thinking. They are beginning to realize that we don't always like things that are good for us, especially if shoved down our throats. They are beginning to realize that patients are customers, and that they will react like any other customer if they are treated as such.

In short, a little salesmanship, as practiced by the automobile salesman, the drug store clerk and any salesperson with the wit to say please and thank you, and cater a bit to our whims and egos, will do a lot to restore the hospitals to the public esteem and affection which, at bottom, they merit.

In other words, you hospitals, why don't you develop a dabble of tact?

(As to this editorial, may we add to the hospitals this further advice: Don't do as we DO; do as we SAY.)—*Detroit Times*, Dec. 26, 1956.

In rural areas, cancer of the skin may comprise 40 to 50 per cent of all cancers seen.

* * *

Basal cell carcinomas are seldom found on the hands or the temporal or cervical areas.

* * *

Complete removal and microscopic examination is the most satisfactory treatment for early, questionable lesions.

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of the Michigan State Medical Society

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FEBRUARY, 1957

NUMBER 2

Cancer Day in Genesee County

By H. B. Elliott, M.D.

Flint, Michigan

EARLY in 1946 the Cancer Education Committee of the Genesee County Medical Society, under the chairmanship of Dr. George J. Curry, voluntarily assumed increased responsibility and promulgated the idea of presenting an educational program for the advancement of the study of cancer on a statewide basis. On March 20, 1946, it presented the first Cancer Day Program. This and the ensuing annual programs were made possible through the voluntary generosity of Mr. Donald E. Johnson, publisher of the *Flint News-Advertiser*. All the programs have consisted of five or six presentations on timely topics directly concerned with cancer problems by outstanding authorities in various cancer fields.

The presentations for the 1946 program were:

- "Cutaneous Malignancy"
Paul A. O'Leary, M.D.—Director, Division of Dermatology, Mayo Clinic, Rochester, Minnesota
- "Cancer of the Uterus"
Louis E. Phaneuf, M.D.—Professor of Gynecology, Tufts Medical School, Boston, Massachusetts
- "Cancer of the Stomach"
Frederick A. Collier, M.D.—Professor of Surgery, University of Michigan Medical School, Ann Arbor, Michigan
- "Cancer of the Genito-Urinary Tract"
Charles B. Huggins, M.D.—Professor of Surgery, Department of Urology, University of Chicago School of Medicine, Chicago, Illinois
- "Cancer of the Breast"
Frank E. Adair, M.D.—Clinical Director of Surgery, Memorial Hospital, New York, N. Y. (President of the American Cancer Society)

This first meeting was attended by 210 physicians; 109 from Genesee County, 100 from other Michigan counties, and one from outside the State of Michigan.

The second program as presented on March 19, 1947, was:

- "Cancer of the Upper Respiratory Tract"
A. C. Furstenberg, M.D.—Dean and Professor of Otolaryngology, University of Michigan Medical School, Ann Arbor, Michigan
- "Cancer Diagnosis—Laboratory Methods"
George N. Papanicolaou, M.D.—Associate Professor of Anatomy, Cornell University Medical School, New York, N. Y.
- "Cancer of the Colon and Rectum—The Modern Concept of Management"
G. Gavin Miller, M.D.—Professor of Surgery, McGill University Medical School, Montreal, Quebec
- "Cancer Research"
Mr. Charles F. Kettering—Chief, Research Division, General Motors Corporation, Detroit, Michigan
- "Hormone Studies in Cancer"
Cornelius P. Rhoads, M.D.—Medical Director, Memorial Hospital, New York, N. Y.

This program was attended by 172 physicians; 111 from Genesee County, fifty-nine from other Michigan counties, and two from outside the State of Michigan.

On March 31, 1948, the substance of the third program was:

- "Cancer of the Osseous System"
Charles F. Branch, M.D.—Former Professor of Pathology, Boston University Medical School, Boston, Massachusetts; Assistant Director of American College of Surgeons, Chicago, Illinois
- "Cancer of the Lung"
Richard H. Overholt, M.D.—Clinical Professor of Surgery, Tufts University Medical School, Boston, Massachusetts
- "The General Principles of Cancer Management"
Allen O. Whipple, M.D.—Emeritus Valentine Mott Professor of Surgery, College of Physicians and Surgeons of Columbia University, and Director of Surgery, Presbyterian Hospital, Director of Surgery, Memorial Hospital, New York, N. Y.

"Extensive Surgical Procedures for Cancer"

Alexander Brunschwig, M. D.—Former Professor of Surgery, University of Chicago; Attending Surgeon, Memorial Hospital, New York, N. Y.

"The Role of Radiotherapy in the Management of Cancer"

Manuel M. Garcia, M.D.—Associate Professor of Radiology, Tulane University Medical School, New Orleans, Louisiana

This program was attended by 212 physicians. Of these, 122 were from Genesee County, eighty-five from other Michigan counties, and five from outside of the state.

The fourth program as presented on April 13, 1949, was:

"Cancer in Children"

Harold W. Dargeon, M.D.—Attending Pediatrician, Memorial Hospital, New York, N. Y.

"The Role of the Surgical Pathologist in Respect to the Cancer Problem"

Arthur Purdy Stout, M.D.—Professor of Surgery, College of Physicians and Surgeons, Columbia University, New York, N. Y.

"Cancer of the Lower Bowel—Present Status of Management"

Thomas E. Jones, M.D.—Chief of Surgical Staff, Cleveland Clinic Foundation Hospital, Cleveland, Ohio

"The Management of Uterine Cancer"

Norman F. Miller, M.D.—Professor of Obstetrics and Gynecology, University of Michigan Medical School, Ann Arbor, Michigan

"The Basic Principles in Cancer Management"

Alton Ochsner, M.D.—The William Henderson Professor and Director of Surgery, Tulane University Medical School, New Orleans, Louisiana

This program was attended by 244 physicians. Of these, 117 were from Genesee County, 127 from other Michigan counties and outside the state.

The Fifth Annual Cancer Day Program was held Wednesday, April 12, 1950.

"Sarcoma"

Herbert M. Elder, M.D., F.R.C.S. (C)—Associate Professor of Surgery, McGill University, Montreal, Quebec

"The Hopeful Aspects of Malignant Lymphomas"

Lloyd F. Craver, M.D.—Attending Physician, Memorial Hospital, New York, N. Y.

"The Management of Cancer of the Mammary Gland"

Cushman D. Haagensen, M.D.—Associate Professor of Surgery, College of Physicians and Surgeons, Columbia University, New York, N. Y.

"The Management of Regional Lymph Node Metastasis"

Grantley W. Taylor, M.D.—Assistant Professor of Clinical Surgery, Harvard University Medical School, Boston, Massachusetts

"Early Signs and Symptoms of Intracranial Tumors"

Paul C. Bucy, M.D.—Professor of Neurology and Neurological Surgery, University of Illinois College of Medicine, Chicago, Illinois

This program was attended by 226 physicians. Of these, 142 were from Genesee County, seventy-eight from other counties in the State of Michigan, and six from outside the state.

Those in attendance accepted this program with such enthusiasm that the benefactor announced that it could be looked upon as a permanent annual enterprise. The committee resolved that it would be a policy to pursue every effort to maintain the highest of standards for the presentation of this annual program.

The Sixth Annual Cancer Day program presented April 18, 1951, was as follows:

"The Diagnosis and Treatment of Bone Tumors"

Bradley L. Coley, M.D.—Attending Surgeon, Memorial Hospital; Associate Professor of Clinical Surgery, Cornell University Medical School, New York, N. Y.

"Radioactive Isotopes"

Robert Reid Newell, M.D.—Director, Departments of Radiology and Radio-Biology, Stanford University Medical School, San Francisco, California

"Cancer of the Thyroid"

George M. Curtis, M.D.—Chairman and Professor of Surgical Research, Medical Department, Ohio State University and Starling-Loving University Hospital, Columbus, Ohio

"The General Aspects of the Cancer Problem"

Arthur W. Allen, M.D.—Chief, East Surgical Service, Massachusetts General Hospital; Lecturer in Surgery, Harvard Medical School, Boston, Massachusetts

"Genito-Urinary Cancer"

Reed M. Nesbit, M.D.—Professor of Surgery, Medical Department, University of Michigan; Chief of Urological Service, University Hospital, Ann Arbor, Michigan

This program was attended by a total of 248 physicians.

The Seventh Annual Cancer Day Program presented April 9, 1952, was as follows:

"The Leukemic States: Their Malignant and Non-Malignant Aspects in Relation to Prognosis and Treatment"

Charles A. Doan, M.D.—Dean and Director of Internal Medicine, College of Medicine, Ohio State University, Columbus, Ohio

"Biochemical Specificity of Cells in Cancer Chemotherapy"

Cornelius P. Rhoads, M.D.—Director, Sloan-Kettering Institute and Memorial Hospital, New York, N. Y.

"Cutaneous Malignancies"

Paul A. O'Leary, M.D.—Chief, Section on Dermatology, Mayo Clinic, Rochester, Minnesota

"The Spread of Tumors"

William J. Boyd, M.D.—Professor of Pathology, University of British Columbia, Vancouver, British Columbia

One-Hour Tumor Conference, moderated by:

R. Arnold Griswold, M.D.—Professor of Surgery, University of Louisville, Louisville, Kentucky

Panel Members:

Traian Leucutia, M.D., Director of Radiotherapy, Harper Hospital, Detroit—and Doctors Doan, Rhoads, O'Leary and Boyd

This program was attended by a total of 264 physicians.

In view of the fact that a great number of those

attending the program have a special interest in the various fields pertaining to neoplasms, it is a policy to arrange for the arrival of some of the speakers in Flint on the afternoon before the programs. This has enabled local and state specialty organizations to meet with the speakers the evening before the regular program when it is deemed appropriate.

Most members of the Genesee County Medical Society seem to feel that there is a steady increase in enthusiasm for the Cancer Day Program. They credit this to the fact that the best speakers available for the presentation of timely topics on cancer are obtained, and feel that a large measure of their success is due to the persistent efforts of a generous sponsor who has served without the knowledge of the general public.

The Eighth Annual Program put on at the Merliss Brown Auditorium at Hurley Hospital, Wednesday, April 8, 1953, was as follows:

"Cancer of the Pancreas and Biliary Tract"

Richard B. Cattell, M.D.—Surgeon, Lahey Clinic, New England Deaconess and New England Baptist Hospitals, Boston, Massachusetts

"Differential Diagnosis and Treatment of Cancer of the Ovary"

Emil Novak, M.D.—Assistant Professor Emeritus of Gynecology, Johns Hopkins University; Gynecologist-in-Chief, St. Agnes and Bon Secours Hospitals, Baltimore, Maryland

"Leukemia, Hodgkin's Disease and Allied Disorders"

Cyrus C. Sturgis, M.D.—Professor and Director of Internal Medicine, University of Michigan Medical School and Hospital; Director of The Thomas Henry Simpson Memorial Institute of Medical Research, Ann Arbor, Michigan

"The Management of Pain Problems Related to Cancer"

Frank H. Mayfield, M.D.—Assistant Professor of Surgery, University of Cincinnati; Neuro-Surgeon, Cincinnati General Hospital, Cincinnati, Ohio

"The Use of Radioactive Isotopes in the Clinical Aspects of Cancer"

Richard H. Chamberlain, M.D.—Professor of Radiology, University of Pennsylvania School of Medicine and Graduate School of Medicine; Radiologist, Hospital of the University of Pennsylvania, Philadelphia, Pennsylvania

Panel Discussion: "Palliation and Terminal Care of Cancer Patients"

Moderator: Charles S. Kennedy, M.D.—Emeritus Professor of Surgery, Wayne University Medical School; Emeritus Chief of Staff and Chief of Surgery, Consulting Surgeon, Grace Hospital, Detroit, Michigan

Panel Members:

Drs. Cattell, Novak, Sturgis, Mayfield and Chamberlain

The primary objective of this program was to encourage refinement and improvement in the care of the patient who stood little or no chance to be separated from his cancer. The scientific program was terminated with a panel discussion on palliation and terminal care. We are not

aware of the presentation of any other panel discussion on this topic. The panel was made up of the speakers and moderated by Dr. Charles Kennedy. All of the participants were quite enthusiastic about giving this difficult subject its due consideration. A large number of those in attendance expressed their appreciation of the efforts to give terminal care more consideration and felt that more can be done to improve terminal care.

The Ninth Annual Cancer Day Program was presented Wednesday, April 14, 1954, with 266 physicians in attendance.

"Cancer Detection in Everyday Practice"

Emerson M. Day, M.D.—Memorial Center, New York, N. Y.

"Early Diagnosis of Cancer of the Lung"

Eugene P. Pendergrass, M.D.—Director of Radiology, University of Pennsylvania

"Progress Report on the Cancer Problem"

Frederick A. Collier, M.D.—Director of the Department of Surgery, University of Michigan, Ann Arbor, Michigan

"Early Cancer from a Pathologist's Viewpoint"

Osborne A. Brines, M.D.—Professor of Pathology, Wayne University, Detroit, Michigan

"Early Diagnosis of Cancer of the Uterus"

Howard C. Taylor, M.D.—Director of the Sloane Hospital for Women, Columbia-Presbyterian Medical Center, New York, N. Y.

Dr. Day emphasized the need of cancer detection in the offices of all practicing physicians rather than in so-called cancer detection clinics, experience with cancer detection clinics in the past few years having indicated that these clinics should be reserved for teaching hospitals and hospitals especially devoted to the management of cancer and related diseases. These clinics will only cover a small fraction of our population and the vast majority of the population must be cared for in the physician's office.

Dr. Pendergrass emphasized the need of further study by means of high voltage radiography.

Dr. Collier's topic covered what has been accomplished in cancer management, and emphasized the need of more early detection and earlier treatment.

Dr. Brines discussed his topic and gave a practical demonstration of early and transitional lesions.

Dr. Taylor also projected Dr. Brines' presentation as it pertained to the uterus.

The scientific program was concluded by a panel discussion on concerted efforts for the prevention and early diagnosis of cancer. The program terminated with a dinner meeting at the

Durant Hotel with Leonard A. Scheele, M.D., Surgeon General U.S.P.H.S., Washington, D. C. Dr. Scheele rendered a report from the U. S. Public Health Service emphasizing the public health aspects of cancer as it pertained to the nation as a whole.

The Tenth Annual Cancer Day Program was presented Wednesday, April 13, 1955, and was specifically designed to discuss prevailing current cancer problems.

"The Prognosis of Cancer from the Viewpoint of the Surgical Pathologist"

Lauren V. Ackerman, M.D.—Professor of Surgical Pathology and Pathology, Washington University School of Medicine, St. Louis, Missouri

"The Outstanding Indications and Possibilities of Radiotherapy in the Treatment of Cancer"

Juan A. del Regato, M.D.—Director, Penrose Cancer Hospital, Colorado Springs; Associate Professor of Clinical Radiology, University of Colorado Medical School, Denver, Colorado

"Vertebral Venous Function and Its Role in the Spread of Cancer"

Oscar V. Batson, M.D.—Professor of Anatomy, University of Pennsylvania Graduate School of Medicine; Assistant Professor of Otolaryngology, University of Pennsylvania, Philadelphia, Pennsylvania

"The Present Status of the Treatment of Pulmonary Cancer"

Brian B. Blades, M.D.—Professor of Surgery, George Washington University School of Medicine, Washington, D. C.

"The Place of Chemotherapy in the Management of Leukemia"

Frank H. Bethell, M.D.—Professor of Internal Medicine and Associate Director of the Thomas Henry Simpson Memorial Institute for Medical Research, University of Michigan School of Medicine, Ann Arbor, Michigan

"Ten Years of Progress with the Cancer Problem"

Cornelius P. Rhoads, M.D.—Medical Director, Memorial Center and Sloan-Kettering Institute for Cancer Research, New York, N. Y.

The program concluded with Dr. Grover Penberthy presiding at a panel discussion on current cancer problems. All of the essayists served on the panel. The dinner meeting at the Durant Hotel, following a social hour, was highlighted by an outline of the current problems in Washington

and their relationship with the international problems which pertain to the "cold war." This scholarly presentation was given by Mr. Ray Henle, the NBC "3-Star Extra" Editor, Washington, D. C.

The Eleventh Annual Cancer Day Program presented Wednesday, April 11, 1956, was as follows:

"Cancer of the Uterine Body: Its Diagnosis and Treatment"

Newell W. Philpott, M.D.—Professor of Obstetrics and Gynecology, McGill University, Montreal, Quebec

"The Psychological Impact of Cancer and Its Therapy"

Arthur M. Sutherland, M.D.—Attending Physician, Department of Psychiatry, Memorial Center, New York, N. Y.

"Problems of Diagnosis and Therapy of Neoplasms Involving the Blood Forming Tissue"

Leon O. Jacobson, M.D.—Director, Argonne Cancer Research Hospital and Professor of Medicine, University of Chicago, Chicago, Illinois

"Preventable Cancers of the Past and of the Future"

Carl V. Weller, M.D.—Chairman, Department of Pathology and Professor of Pathology, Medical School, University of Michigan, Ann Arbor, Michigan

"Sarcomas of Soft Somatic Tissue"

Theodore R. Miller, M.D.—Attending Surgeon, Memorial Center, New York, N. Y.

Panel Discussion of Current Cancer Problems

Moderated by Dr. Pollard

Members of Panel:

Drs. Philpott, Sutherland, Jacobson, Weller, and Miller

The principal objective of this program was to emphasize the topics which had not been given sufficient emphasis during the past five years. This was especially true in Dr. Philpott's discussion of cancer at the upper extremity of the uterus, Dr. Sutherland's discussion of the psychiatric problems in respect to cancer management, and Dr. Miller's discussion of soft somatic sarcomas. The panel discussion moderated by Dr. Pollard emphasized those points which gave rise to questions or were not sufficiently emphasized during the previous part of the program.

Cancer, in reality, is recognized by microscopic examination of a biopsy specimen.

* * *

The victim of cancer should not, above all other human ills, be subjected to medical quackery.

* * *

Every scientific advance in the direction of alleviation or cure of cancer deserves the most devoted attention of the medical profession.

* * *

Cancer detection surveys are best done by interested physicians as part of office practice.

* * *

About 42 per cent of all cancers are accessible by a minimum physical examination.

* * *

Cancer detection should be a phase of general, periodic health surveys.

Detection centers are unnecessarily costly, geographically discriminatory and frequently conducted by physicians with extremely limited interests.

* * *

Withhold all hormone therapy until a diagnosis has been made to explain any irregular vaginal bleeding.

* * *

Always make a careful inspection, and biopsy, and treat a diseased cervix before doing a hysterectomy on such patients.

* * *

The importance of examining patients at their first visit, even though vaginal bleeding is present, cannot be overstressed.

* * *

The clinically silent retroperitoneum is an ideal site for unhampered growth of tumor cells.

Dystrophia Myotonica

By Stanley Bardwell, M.D.
Flint, Michigan

DYSTROPHIA myotonica has in the past been poorly understood and, unfortunately, has been confused with many of the other diseases which principally affect the myoneural unit. It remains precisely in that same category today, some forty years since the original articles describing its characteristics were published. It is an abstruse disease that can be diagnosed by the simplest history and physical examination. Truly, the physician who takes care to shake hands with his patients is as mindful of clinical medicine as he is of social amenities.

Dystrophia myotonica is a "heredo-degenerative" malady since it tends to occur in a more severe form and at an earlier age in the offspring of affected parents. It affects virtually every organ system of the body, and is a familial, endogenous, inherited disease which displays as a prominent feature myotonia—an uncommon and fascinating sign and symptom. Myotonia is defined as a painless abnormal persistence of the state of contraction. Waring and Ravin in 1940 and 1941 published very comprehensive studies on the nature of myotonia, and have as thoroughly discussed in allied articles the clinical pattern found in dystrophia myotonica.

The existence of myotonia in an individual immediately places the illness within the framework of an intrinsic muscle disease, with the exception of severe hypothyroidism in which myotonia is occasionally seen. The differential diagnosis is happily limited to either dystrophia myotonica, myotonia congenita, myotonia acquisata, myotonia intermittans, or one of the two paramyotonias, the latter three of which occur only under the influence of cold. The myotonia which is reported to occur without a hereditary component is called myotonia acquisata and most commonly follows trauma.

Those patients afflicted with dystrophia myotonica rarely complain of their inability to immediately loosen their grasp. Much more disturbing is the progressive, inviolable atrophy of muscle which leads to the tragic weakness and disability under which the severely affected patient suffers. All skeletal muscle with the pos-

sible exception of the diaphragm is involved, but in a dissimilar degree. The most pronounced atrophy is found in the muscles of the forearm and face, the quadriceps, and the dorsiflexors of the foot. Quite typically, then, one finds a myopathic facies, taut cord-like sternocleidomastoids, a nasal twang, and impaired deglutition. It is this profound muscle atrophy which differentiates it from myotonia congenita, myotonia acquisata, myotonia intermittans, and the paramyotonias.

Characteristically, there are prominent multiple endocrine gland deficiencies resulting from testicular, ovarian, adrenal, thyroid and anterior pituitary atrophy. Consequently, menstrual irregularities, early menopause, infertility, and impotence are found. Laboratory findings of a low basal metabolic rate (the PBI is within normal limits), creatinuria, and low twenty-four-hour urinary 17-ketosteroid and pituitary gonadotrophic hormone excretion lend strong support to the concept that dystrophia myotonica is more than a simple muscle defect. Most importantly, these constitutional effects further differentiate dystrophia myotonica from all other diseases of muscle and the appendant charts indicate the comparative benignity of the remaining myotonic diseases.

Case Reports

Case 1.—P.P., a twenty-year-old, white, unmarried woman entered the hospital on March 15, 1955, with a productive cough of insidious onset and of "several" months' duration, which had been preceded by increasing muscle weakness and a 20-pound weight loss during the previous year. She was referred to the hospital by her physician with a provisional diagnosis of "probable pulmonary tuberculosis" and "general debility." The examiner on shaking hands with the patient noted the patient's inability to loosen her grasp. She admitted that she had suffered this handicap since early childhood, but happily stated that this particular problem was slowly becoming less manifest, and that her primary concern was that of increasing muscle weakness which was responsible for her social and economic dependence.

The patient felt that her childhood was uneventful. The mother remembered the patient as being slow in development. She is said to have sat at eight months, walked at seventeen months, and talked at two and

one-half years. She had "drooled" constantly as a child and require a bib during her pre-school years even while at play. Operations had been performed on both ankles at the age of ten years because of inability to free her toes of the ground while walking.



Fig. 1. Case 1. P.P., a twenty-year-old white woman with advanced dystrophia myotonica. Note the high frontal baldness, and thin cord-like sternocleidomastoid muscle. Height, 4 feet 11 inches, 65 pounds.

A tonsillectomy was performed at the age of ten years because of a nasal voice.

A maternal aunt apparently expired at the age of thirty-four years of poliomyelitis, although little is known of the circumstances surrounding her death. The mother, forty-four years of age, required help on alighting and boarding a bus because of muscle weakness. She also walked with a steppage gait, and presented frontal baldness and a mild myotonia. All of the family members wore glasses but no specific history of cataracts was obtained.

The patient's menarche was at age thirteen and one-half years, and since the age of nineteen years she had had irregular menses in duration and interval, and the amount of flow had become increasingly scanty.

On physical examination, the patient's height was 4 feet, 11 inches; her weight, 64 pounds. She was apathetic and walked with a halting high steppage gait. There was marked frontal baldness. She enunciated poorly and had a distinct nasal twang. Her

head uncontrollably fell backwards when reclining from a sitting position. The axillary and pubic hair was sparse but of normal female distribution. The palate was quite noticeably arched and high. The sternocleidomastoids were cord-like, and the general muscle mass was markedly diminished. The breasts were small and undeveloped. The blood pressure was 96/60; the heart rate was 50/minute. The rhythm was sinus bradycardia with an occasional premature ventricular contraction. The vaginal vault and uterus were small. The patient was unable to smile or wrinkle her brow, and there was gross weakness of all muscle groups for the patient's age and sex. Aside from the diminished but equal deep tendon reflexes, the neurologic examination was within normal limits.

The hemogram, urinalysis, serology, PPD No. 1 and No. 2, coccidioidin skin tests, BUN, serum Na, K, Ca, P, uric acid, creatinine, urine calcium, alkaline phosphatase, total protein, A/G ratio, BSP, Thorne test, PBI, BMR, cholesterol, and glucose tolerance test with phosphorus determinations were all within normal limits.

The twenty-four-hour urine excretion of creatinine was 178 mg. (normal: 700 to 2,000 mgs./24 hours); the twenty-four-hour urine excretion of creatine was found to be 90 mgs. (normal: 0 to 100 mgs./24 hours for females). The creatinine index was 5.9 (normal: 18 to 30; defined as the ratio of creatinine in mgs. excreted in the urine in twenty-four hours to the body weight in kilograms). The twenty-four-hour urinary excretion of 17-ketosteroids was 3.7 mgs. (normal: 6 to 15 mgs. for females).

Case 2.—D.P., a twenty-six-year old, white, married, typing teacher entered the hospital on October 8, 1955, with a diagnosis of a lower respiratory infection of two days' duration. On obtaining the history, the patient incidentally revealed that she had had painless cramping of the muscles for a period of six years, made worse by cold, and of a progressive nature. This was more recently associated with muscle weakness and was a hindrance in her occupation as a typing instructor. She preferred this to less technical classes, however, because after prolonged speaking she was affected by a "cramping at the root of (her) tongue." A sister was similarly affected and both the patient and her sister, a nurse, were benefited by quinine, but after a bout of tinnitus discontinued use of the drug.

The patient's past medical history was uneventful except for an appendectomy at age fourteen and a bout of "diarrhea due to nerves" for which hospitalization was required. The mother was afflicted with diabetes mellitus. With the exception of the one married, childless sister with myotonia, no evidence of a hereditary degenerative disease was elicited.

The patient's menarche was at age twelve years and had always been regular in duration, amount, and interval. She had been married six years and despite efforts to conceive had been quite unsuccessful.

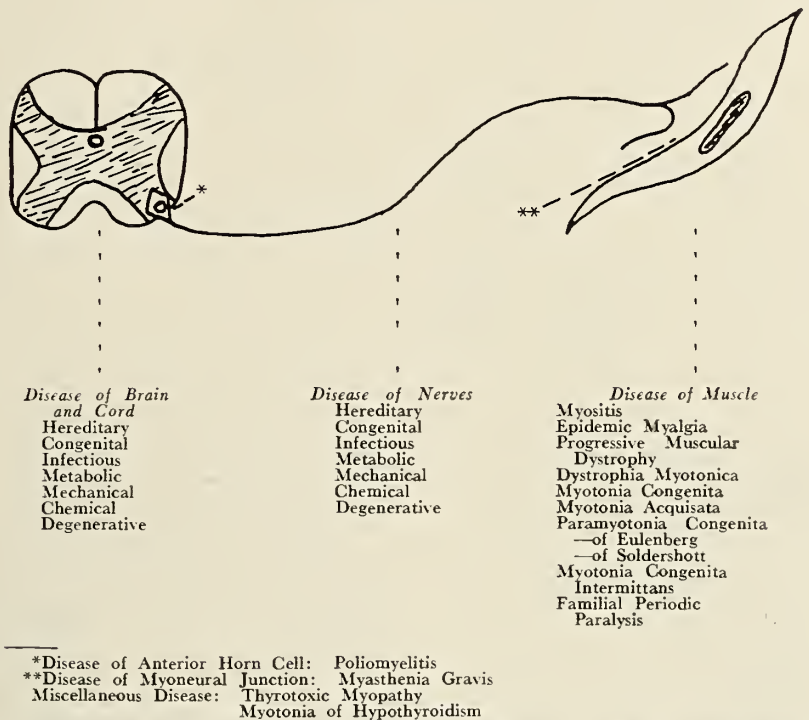
Physical examination revealed the patient's height to be 5 feet 5 inches and her weight 95 pounds. She was a thin, alert, intelligent woman with slight frontal baldness and temporal hollowness. The total muscle mass

was diminished. There was marked arching of the palate. Myotonia was severe and a lingering muscle furrow was seen after percussion of the muscles of the forearm. The blood pressure was 96/60, and the heart rate 60/minutes with a sinus rhythm. The skull films revealed a very small sella turcica and was sug-

commonly found as it was in both patients, but most radiologists decry the use of its presence as indicative of anything but a normal skull. Enlarged sinuses and an elongated mandible are inexactly reported in some cases.

TABLE I. DISEASES AFFECTING MUSCLE

Myoneural Unit



Dystrophia Myotonica is an intrinsic muscle disease in which two important distinguishing characteristics are profound muscle atrophy and myotonia.

gestive of hyperostosis frontalis interna. The deep tendon reflexes were equal but were markedly diminished throughout.

The twenty-four-hour urine excretion of creatinine was 618.8 mgs.; the twenty-four-hour urine excretion of creatine was 18.2 mgs. The creatinine index was 14.4. The twenty-four-hour urinary excretion of 17-ketosteroids was 3.2 and 11.1 mgs. on two determinations. The twenty-four-hour excretion of pituitary gonadotropin (FSH) in urine was seven rat units, forty mouse units, and 150 international units (normal: one to twenty-five rat units; five to fifty-five mouse units; fifty to 400 international units).

These two cases illustrate most of the features described in dystrophia myotonica. Radiologic studies are of distinct benefit as confirmatory evidence for the diagnosis. Typically the sella turcica is found to be in the 6 x 8 mm. range (lower limits of normal: 8 x 10 mm.) as it was in the first case. Hyperostosis frontalis interna is

Gunnar Wohlfart, in an excellent article published in 1951, describes three stages in the muscle of patients with dystrophia myotonica. Stage I reveals inward migration of hypolemmal nuclei with a mixture of hypertrophic and atrophic muscle fibers. Stage II shows central rows of nuclei, single hypertrophic and many atrophic fibers separated by increasing amount of connective tissue with fatty infiltration. Stage III shows marked atrophy of fibers separated by increasing connective tissue with fatty infiltration. It is felt that the second stage is pathognomonic of dystrophia myotonica if there is an associated thick peripheral sarcoplasm. A muscle biopsy in the first patient was consistent with Stage III of this classification. Stage I is descriptive of myotonia congenita, and Stage II is suggestive of the histologic pattern of muscle in progressive muscular dystrophy except for distinctive annu-

DYSTROPHIA MYOTONICA—BARDWELL

TABLE II. DISEASES OF MUSCLE

Disease	Myofibrositis	Epidemic Myalgia	Progressive Muscular Dystrophy	Dystrophia Myotonica	Myotonia Congenita	Familial Periodic Paralysis	Myotonia Acquisata	Myotonia Congenita Intermittans	Paramyotonia
Synonyms	Torticollis Pleurodynia	Sylvest's disease Bornholm disease	Fascio-scapulo-humeral (childhood)	Steinert's disease Myotonia atrophica	Thomsen's disease	—	—	—	of Eulenberg of Solder-shott At birth
Age of onset	Adult	10-25 years	5-35 years	15-30 years	All ages	5-20 years	Adult	—	
Etiology	Familial cold; trauma	Infectious Epidemic	Heredo-degenerative	Heredo-degenerative	Hereditary	Hereditary	Trauma	Cold	Cold
Sex ratio	Equal	Equal	Equal	Equal	Equal	2:1 Male	Equal	?	?
Pain	++	++	0	0	0	0 or +	0	0	+
Weakness	0	0	+	+	0	Paralysis in attacks	0	0	+
Myotonia	0	0	0	++	++	0	+	+	0—cramps
Muscle atrophy	0	0	++	++	0	0	0	0	+
Constitutional	0	Fever Chills Abdominal pain	0	Cataracts Cardiac Endocrine deficiency	0	0	0	0	0
Deep tendon reflexes	Normal	Normal	Hypoactive	Hypoactive	Normal	Normal	Normal	Normal	Normal
Muscle hypertrophy	0	0	++	0	0 or +	0	0	0	0
Therapy	Symptomatic	Symptomatic	Glycine Vitamin E	Cataract surgery Quinine	Quinine	Potassium chloride	Quinine	Heat	Quinine
Prognosis	Excellent	Excellent	Death from secondary infection after 10 years	Death from secondary infection	Excellent	Excellent	Excellent	Excellent	Excellent

lets which are not found in the muscle of patients afflicted with dystrophia myotonica.

Thomsen, a Danish physician in 1876, first described the signs and symptoms of myotonia congenita from which he and three generations of his family suffered. Subsequently, the growing number of atypical cases reported in the literature were clarified simultaneously and independently by Batten, Gibb, and Steinert, and from their studies arose the concept of a clinical entity of myotonia atrophica in 1909. Numerous investigators have since emphasized the existence of the disease and added to its many facets. Dystrophia myotonica is the term now most commonly employed but either term can be justified.

Ophthalmologists have played a significant role in delineating the disease from those other maladies previously mentioned which also manifest myotonia. Since an early and singular type of cataract formation is a cardinal finding, a slit-lamp examination is of particular importance. Cataracts rarely mature before the age of forty-five years, and require ten to twenty years to mature after the onset of the first major symptoms of dystrophia myotonica appear. They are described as fine star-like opacities with green, bluish hues and are found immediately beneath the anterior and posterior capsules. The first patient, P.P., was found to have a few fine bodies beneath the anterior capsule of the lens. A chronic, non-

specific blepharitis and conjunctivitis is not infrequently found.

Dystrophia myotonica is said to occur more frequently in Europe, America and Japan, but little rationale for a particular geographic distribution is given other than nonrecognition of the disease.

The laboratory diagnosis perhaps rests upon the biopsy of muscle and the characteristic findings of creatinuria, and decreased excretion of creatinine, and the 17-ketosteroid and FS hormones. These, of course, also indicate the stage and severity of the disease. A reduced creatinine index (coefficient) is consistent with the diagnosis but is found in such diseases as dermatomyositis, lupus erythematosus, and progressive muscular dystrophy.

Sinus bradycardia and hypotension are almost constantly found. Nonspecific electrocardiographic changes reflect the atrophy of the myocardium. A prolonged PR interval is found in 50 per cent of cases, and prolonged QRS interval and ectopic beats are not unusual findings.

High arched palates are more frequently described in the last decade than in years past.

Mental changes reported in early articles are most likely produced as much by the conditions of life which the disease itself imposes as they are inherent and do not form a particular pattern.

Amino-acetic acid, anterior pituitary extract,

testosterone propionate, estrogens, cortisone, ACTH, epinephrine, pilocarpine, thyroid, and pronestyl are only a few of the many drugs which have been tried, all with equivocal results. Quinine is quite effective in the treatment of myotonia, but it is rarely necessary. Patients can as easily dissipate the myotonia by "warming up" as they can by its use. The second case is that of a teacher of typing and bears witness to the innocuousness of myotonia alone.

Therapy at the present time, clearly, is entirely symptomatic. The muscle atrophy at this juncture in therapeutic medicine can neither be stopped nor reversed. Cataracts are successfully removed surgically. Patients with severe dystrophia myotonica, in contrast to patients with other myotonic diseases, eventually require social and financial support.

Before the modern era of anti-infectious agents, patients with advanced disease most commonly succumbed to secondary pulmonary infections (both of these patients were hospitalized for respiratory infections), and aspiration pneumonia is a constant hazard. Congestive heart failure may be a cause of the demise because of myocardial atrophy and refractoriness to therapy.

The responsible fundamental defect in dystrophia myotonica is unknown, and it continues to be a curiosity despite the fact that its prevalence is probably much greater than is generally supposed.

Summary

Dystrophia myotonica is an uncommon myotonic disease of the heredodegenerative type af-

fecting equally both sexes. In its most advanced form there is severe muscle atrophy and multiple endocrine gland deficiencies. The treatment is entirely symptomatic and does not alter the course of the disease. Two typical cases are presented.

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AMERICAN COLLEGE OF GASTROENTEROLOGY

A regional meeting of the Central Region of the American College of Gastroenterology will be held in Grand Rapids, Michigan, Sunday afternoon, March 17, 1957. The scientific sessions will be at the Hotel Pantlind commencing at 1:45 P.M.

Participating in the program will be Joseph B. Kirchner, M.D., Chicago, Illinois; William Fuller, M.D., Grand Rapids, Michigan; Joseph Shaiken, M.D., F.A.C.G., Milwaukee, Wisconsin; C. Wilmer Wirts, M.D., F.A.C.G., Philadelphia, Pennsylvania; Garnet Ault, M.D., Washington, D. C.; Don W. McLean, M.D., Detroit, Michigan; Frederick A. Collier, M.D., Ann Arbor, Michigan; Fred Hodges, M.D., Ann Arbor, Michigan, and C. Allen Payne, M.D., Grand Rapids, Michigan.

There will be three individual papers and a panel

discussion on "Gastrointestinal Bleeding" moderated by Dr. Collier with the speakers of the afternoon as the participants.

Arthur A. Kirchner, M.D., F.A.C.G., Los Angeles, California, President of the American College of Gastroenterology, and James A. Ferguson, M.D., F.A.C.G., governor of the College for Michigan, will preside at the sessions. Lynn A. Ferguson, M.D., F.A.C.G., Secretary-General of the College, is the chairman of the program and arrangements committee.

The Central Region which consists of the states of Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota and Wisconsin, will be represented at the meeting.

Members of the medical profession are cordially invited to attend.

The Modern Treatment of Uremia

By Marshall W. Alcorn, M.D.

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THE TERM uremia has had a broad and somewhat vague meaning in the past, but along with the progress in general medicine through the years, it is much better understood today, and therefore the condition should be better treated than formerly. A simple practical definition is that it is a disease, or toxic state, resulting from the accumulation of retention products in the blood, which are normally excreted by the kidneys through the urinary stream. However, uremia may be a very complex condition involving the multiplicity of renal function, general metabolism and endocrinology, each of which may be complex in itself. For purposes of treatment, this paper will consider the excretion of retention products and the regulation of electrolytes as of primary importance for the maintenance of life.

The etiologic factors in the production of uremia are many and frequently complex. For reasons of simplicity, they are classified as pre-renal, intrarenal and postrenal factors. The pre-renal factors are diminished fluid intake and a reduction in the constituents of the blood as occurs in hemorrhage, diarrhea and vomiting. The intrinsic renal factors are those which produce the syndrome known as lower nephron nephrosis, such as crush injury, surgical shock, transfusion reaction, sulfonamide anuria, and mercury poisoning. The postrenal causes are those which produce an obstruction to drainage of urine and are not primarily defects of renal function.

For purposes of prognosis and treatment it is useful to classify uremia as acute or chronic, or as reversible or irreversible. One cannot expect to alter greatly the course of an old chronic glomerulonephritis, with edema and with albumin and casts in the urine, advanced to the stage of uremia, whereas very dramatic results are frequently obtained in patients with acute or reversible renal insufficiency. Although even the artificial kidney has been used in chronic cases, no lasting improvement has resulted, and the risks involved scarcely seem justified.

The general principles of treatment of uremia may be summarized as:

1. The use of antibiotics for the prophylaxis and treatment of infection.
2. Restriction of electrolytes and fluid during the period of oliguria.
3. Administration of high caloric intake as a means of suppression of protein catabolism.
4. Avoidance of elective surgery, excessive transfusion and other procedures which may increase protein breakdown and the production of retention products.
5. Removal of retention products and correction of body chemistry by artificial dialysis.

Neubauer and Dunsmore⁸ treated a series of eighty-four patients suffering from uremia and acidosis on the basis of intrinsic renal disease, with a combined electrolyte approach. Their cases could be classified as chronic. In patients with coma, all therapy was given intravenously, and fluid intake was kept at 2500 to 3000 cc. daily.

1. After drawing blood for chemistry in the a.m., 1500 cc. 5 per cent glucose in water or 10 per cent Travert Solution with 2 to 6 grams calcium gluconate (10 per cent Solution) was given in a two to two and one half-hour-period. Potassium Acetate 2 to 4 grams was added if the serum value was low, but if the potassium is elevated, 10 units of regular insulin was added to the intravenous solution.

2. Three to four hours later, 120 to 240 mEq. of 1 or 1½ molar sodium lactate with 15 grams aminophyllin was given slowly for two hours. The 1-Molar concentration was used when edema and cardiac embarrassment was suspected. The amount of sodium lactate was determined by the clinical response and the fall in blood urea nitrogen. When given as one-half-molar, this was made up with equal parts of 5 per cent glucose in water.

3. Three to four hours later, 1000-1500 cc. 5 per cent glucose in water or 10 per cent Travert Solution, with 2 to 6 grams of calcium gluconate and 10 units of insulin was given. Potassium was added as needed.

4. When a patient roused from coma and could take oral feedings, the intake was maintained at 2500 to 3000 cc., with water, tea and sugar, and ginger ale. The diet was gradually increased, from salt-free toast and butter, mashed potatoes, and hard candy, to 1.0 gram salt and 20 grams protein.

5. As soon as practicable, oral electrolyte therapy was begun with: (a) 40 cc. 1.0 molar sodium lactate, four to five times daily; (b) 20 to 40 cc. 10 per cent calcium lactate in Amphojel four times daily; (c) When necessary, as judged by a falling serum value, 5 to 10

cc. 1-molar potassium was given three to four times daily. If there was a rising potassium value, this was stopped.

Under this regimen, the majority of patients in this chronic or relatively irreversible state of uremia showed chemical and clinical improvement. It is believed that sodium is better handled as the lactate in hypertonic form. On forced calories, sodium lactate and calcium lactate therapy, all cases displayed a fall in urea and serum potassium levels. The exact mechanisms of all this are not clear, and future investigations and experience will improve our understanding of them.

In any discussion of artificial dialysis, the artificial kidney is of prime importance. W. J. Kolff and Charles C. Higgins,⁷ who pioneered and have greatly contributed to the development of the artificial kidney, state that it should not be considered a competitor, but rather as a valuable adjunct to the medical management of acute and chronic uremia. Certainly, much has been learned through the use of the artificial kidney concerning uremia and its treatment.

The conception and principles of the artificial kidney are not new, since they were first introduced on an experimental basis by Abel, Rowntree, and Turner in 1912.¹ However, it remained for Kolff⁵ to make the first use of it in humans, in 1945, when he dialyzed a sixty-seven-year-old woman in complete anuria with a blood urea of 400 and serum potassium of 11.5 with a most dramatic result. Following treatment, the blood urea was reduced to 120, and the potassium to 5.8, after which complete recovery occurred. Since then, Kolff and others have done much to develop the method and now, ten years later, a fair appraisal can be made.

In the use of the artificial kidney, blood is withdrawn from a vein or an artery, and guided through a system of membranes, with blood on one side, and a rinsing fluid on the other. Dialysis then occurs. All retention products, such as urea, uric acid, creatinin and phenols pass readily through the membrane. Heparin is used to prevent the clotting of blood. Electrolyte equilibrium between blood and the rinsing fluid occurs if dialysis is continued a sufficient time. The plasma electrolyte content can be changed at will, by varying the composition of the rinsing fluid. By this method, as much as 280 grams of urea have

been removed by one dialysis and the treatment may be repeated in four to five days.

Experimentally, the artificial kidney has prolonged the life of dogs for twenty-five days after bilateral nephrectomy. In the Korean War, the army established a center for the treatment of soldiers with renal insufficiency, and the mortality for patients with anuria was reduced from 90 to 60 per cent by the artificial kidney. Why then has not the artificial kidney come into common usage, and why is it not available for any patient who needs it?

Kolff⁶ stated the dangers and complications in its use as follows:

1. Pyrogenic reactions may occur.
2. Hemorrhage.
3. Changes in blood volume occur as determined by the flow rate from the artery.
4. Technical error such as bleeding through a hole in cellophane membrane.
5. Hemolysis will occur, due to high temperature of rinsing fluid or the omission of salt, within two minutes.
6. Morphologic changes of blood, such as leucopenia, usually occurs during dialysis.
7. Hypertension when too rapid flow occurs.
8. Relative urinary suppression for one to two days following dialysis.

In addition, the necessity for a trained team of technicians, nurses and physicians makes the artificial kidney so far entirely impractical to use except in a large medical center where such help is readily available. For these reasons, the artificial kidney has remained in limited use, with only a few in this country. Time and trial may see it become a practical instrument for use in most hospitals. Actually, it has the possibility of being much more effective in the saving of lives and restoration of health than the much publicized "iron lung."

In 1923 Ganter² originated the method of peritoneal dialysis, which was not practical because of peritonitis. In 1946, after the advent of penicillin, the method came into use with much enthusiasm, but it was abandoned in 1951, because of the high rate of fatal peritonitis and difficulties in controlling water and electrolyte balance. Recently, a method of intermittent peritoneal dialysis was described by Waugh⁹ which gives promise of removing most of the objections and dangers of peritoneal dialysis as formerly done.

This method consists of doing a routine ab-

dominal paracentesis in the midline below the umbilicus and instilling the lavage fluid at body temperature through intravenous tubing attached to the trocar. In a brief period, 3 to 3.5 liters are instilled, the trocar is then removed, and the skin wound is plugged with a rubber cap and a dressing is applied. After two to four hours, the patient is placed in a sitting position and the dressing and the plug are removed, and the trocar is reinserted. The lavage fluid is then drained by gravity and the wound is redressed. This method of dialysis may be repeated as often as needed, even two to three times in one day. Waugh showed that the blood urea and potassium intoxication were reduced by this method, and, in one instance, autopsy showed no evidence of peritonitis after several dialyses over a period of twenty-nine days. This method appears to have the advantage of simplicity, availability and safety, and with further experience it should prove to be a valuable adjunct to the conservative treatment of severe uremia or potassium intoxication.

Any treatment of acute renal insufficiency must consider the potassium factor. Proteins and fruit juices are rich in this electrolyte and must be restricted in the diet. Muscular activity promotes catabolism with the release of potassium ion and therefore it must be restricted to the absolute minimum. The administration of glucose and insullin is protein-saving and allows the cell protein to retain or bind more potassium with less tendency to hyperpotassemia. Calcium is administered, as it is believed to counteract the toxic effects of potassium on the myoneural junctions of the conducting mechanism of the heart. Such procedures are valuable, but they do not remove this electrolyte from the blood at a time when its plasma level poses a threat to cardiac function.

Hicks³ was the first to demonstrate the effectiveness of lavage of the intestinal tract in removing potassium in patients in acute uremia. His work inspired Kelley and Hill's investigations of two problems of such an approach. One was the development of an irrigating fluid which would remove a maximum amount of potassium and nitrogenous products with a minimum disturbance of fluid, electrolyte, and osmotic balance. The second problem was evaluation of the relative efficiency of different portions of the gastrointestinal tract as a dialyzing membrane to adjust any electrolyte imbalance in the absence of renal function.

Kelley and Hill⁴ performed a series of experiments in dogs in which they produced anuria and uremia by bilateral ligation of the ureters or by bilateral nephrectomy. In different animals they then perfused the stomach, the duodenum or the jejunum after the intravenous injection of potassium, and they were able to show that the jejunum is the most efficient site to secrete potassium into a slightly hypertonic solution. In addition they determined a hypertonic and iso-osmotic solution to be the most efficient dialyzing fluid as follows: NaCl 6 grams per liter, NaHCO_3 3 grams per liter, Calcium Gluconate 1 gram per liter, and Glucose 20 grams per liter. In addition to potassium, they were able to extract large amounts of urea and concluded that the cells of the jejunum either have more inherent capacity to secrete potassium into a slightly hypertonic and essentially iso-osmotic perfusate or else they act as a better dialyzing membrane.

The clinical application of this method of dialysis was carried out by means of both a Levin tube and a Miller-Abbott tube. The Miller-Abbott tube is passed to the jejunum, and through the Levin tube in the stomach the perfusate solution is allowed to drip and is aspirated from the Miller-Abbott tube. The rate of perfusion is adjustable, and as much as 24 liters in twenty-four hours have been used. The method has been found to be simple, practical, inexpensive, and equally as effective in man as it was in the experimental animals, rapidly reducing dangerously high levels of serum potassium to safe levels, and at the same time adjusting fluid balance and other electrolytes. Potassium levels above 7.5 mEq. may lead to intoxication and sometimes the characteristic sudden death that occurs in uremia. The signs and symptoms of hyperpotassemia are bradycardia, dyspnea, respiratory paralysis, coma and cardiac arrest. Electrocardiographic findings are characteristic. In cases where the Miller-Abbott tube cannot be passed, a jejunostomy can be performed and used for dialysis.

Case Reports

Case 1.—A seventy-eight-year-old white man was admitted to the hospital with complete urinary obstruction, due to a grade IV prostatic hypertrophy, which felt benign. A residual urine of 900 cc. was obtained, and a balloon catheter was left in place. The patient was thin, with a poor appetite. Moderate anemia was present, and the blood urea was 111 milligrams per cent, and the serum acid phosphatase normal. One week

later, after correction of the anemia by transfusion, diet and adequate fluid intake, the blood urea was 75, and the patient's appetite and strength still poor. The Miller-Abbott tube was started down on the ninth day of hospitalization; the following morning it was in the jejunum, and the dialyzing fluid was started through the Levin tube. Twenty-four hours later the blood urea was 45.8 mg., which dropped to 36.8 the next day. The tubes were then removed. The patient now had a good appetite, and rapidly regained his strength. Three days later the blood urea was 45, and the patient was scheduled for transurethral prostatic resection. This was done in two stages, and he made a normal convalescence, and was discharged on the thirtieth day of hospitalization, with residual urine of 25 cc. and blood urea of 48.

Case 2.—A forty-one-year-old white man developed oliguria thirty-six hours following a left nephrectomy for a giant hydronephrosis which contained an estimated 3 to 4 liters of hydronephrotic fluid. On the fifth post-operative day, the urine output was 85 cc., and the blood urea had risen to 123 milligrams per cent, from a preoperative level of 21 milligrams per cent. A paralytic ileus occurred coincidentally, and hiccoughing became distressing on the second postoperative day, when a Miller-Abbott tube was started down. No relief of distention occurred, and the blood urea rose to 331 on the seventh postoperative day. A Levin tube was substituted for the Miller-Abbott tube, without benefit, and repeated attempts to pass the Miller-Abbott tube past the pylorus failed, because of the severe distention of the bowel. On the eighth postoperative day, the patient was in serious condition, with blood urea of 422. 500 cc. of blood had been transfused during the operation, but none had been given since. His serum proteins were 6.2 grams per cent, with a reversal of the A/G ratio. The patient's condition at this time was moribund, and it was decided to do a jejunostomy. This was done at midnight under a local anesthetic in the patient's room, and a large caliber catheter left in a loop of the jejunum. The nurse was instructed to irrigate the catheter with 50 cc. of the dialyzing fluid every fifteen minutes. The following morning the patient's condition was much improved, diuresis had begun, the distention had disappeared, and oral feedings were started. Thirty-six hours after the jejunostomy was done, the blood urea had dropped to 123, and to 44 on the fourth day. The patient then made a complete recovery with a blood urea of 23.9 at the time of discharge from the hospital. He has remained well since.

Summary

Recent developments in the treatment of uremia have been briefly reviewed. They offer so much more to the patient with uremia than

formerly could be hoped for that every physician called upon to treat this condition has as a result a far greater responsibility than formerly. Kolff⁹ has stated that today death from acute renal insufficiency should be extremely rare.

When a patient is seen with acute renal insufficiency, with severe oliguria or anuria, a real medical emergency exists, and prompt institution of treatment is important. Antibiotics are administered with avoidance of elective surgery, excessive transfusion and other procedures which may increase protein catabolism, and the production of retention products. The correction of body chemistry and the removal of retention products by some form of dialysis is needed. Of the different methods of dialysis, intestinal lavage by means of the Levin tube in the stomach for intake, and the Miller-Abbott tube in the jejunum for suction, is recommended. With this in mind, the Miller-Abbott tube should be started down as soon as the condition is recognized. The intermittent method of peritoneal dialysis gives promise of safety and effectiveness. The artificial kidney is still reserved for use by the highly-trained team in a specialized center.

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Sterilization of Ureteral Catheters

By J. M. Hammer, M.D., M. J. Hickman, M.D.,
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ALL CYSTOSCOPISTS agree that ureteral catheters should be sterile. Many methods of sterilization are in use, but apparently the catheters remain unsterile and are used in that condition.

Noting the consistent contamination of cultures taken at cystoscopy, we turned to past and current literature and to urology textbooks in the hope of finding a more satisfactory means of sterilization. A search of the literature yielded but three references,¹⁻³ and only one of these (from 1920) was directly related to the sterilization of cystoscopes and ureteral catheters. Textbooks on urology offered no further aid. They all stated that sterile catheters must be used, but the methods of sterilization were rarely mentioned. In no instance was a procedure given in such detail that it could be set up from the description.

As a result of these experiences, we began experiments to determine the degree of contamination in ureteral catheters and to find an adequate method of sterilization.

Procedure and Results

Several experiments were carried out. In the first, catheters were obtained from several cystoscopists. The catheters were immersed in flat GU sterilization pans containing Detergicide or 1:1000 mercury oxycyanide. After a thirty-minute period of immersion they were removed under sterile conditions, cut with sterile scissors into two-inch lengths, and the sections dropped directly into trypticase soy broth (Baltimore Biological Laboratory). In every case the catheters were found to be contaminated. The five most common organisms cultured from the catheters were *Pseudomonas aeruginosa*, *Proteus mirabilis*, *Bacillus subtilis*, *Aerobacter aerogenes*, and *Staphylococcus albus*.

In the second experiment, ureteral catheters ranging in size from #4 to #6 were injected with broth cultures of the five organisms isolated in the first experiment. After contamination, the catheters were immersed for sixty minutes in

separate flat GU pans containing 2 per cent Westcodyne, 2 per cent Amphyl, 2 per cent Osyl, Detergicide, and 1:1000 mercury oxycyanide. The catheters were removed from the pans, cut into sections, and cultured as before. The organisms were recovered in every case.

In the third experiment, catheters were injected with cultures of the same five organisms and autoclaved for thirty minutes at 121° C. and fifteen pounds pressure. When the catheters were cut into two-inch sections and cultured, no growth was obtained.

Ureteral catheters were injected with broth cultures of the five organisms and sealed in plastic envelopes in the fourth experiment. The envelopes were exposed to three million r.e.p.* in the van de Graaf machine (an electron beam). No growth was obtained when these catheters were cut into sections and cultured.

To demonstrate that sterilizing solutions do not always come in contact with the entire surface of the catheters, two twelve-inch lengths of polyethylene tubing were immersed in a 1 per cent eosin solution, one in a flat pan and the other in a cylinder. When the length of tubing was placed in the flat pan, an air bubble was trapped in the lumen and prevented the eosin from entering except for a short distance at each end. In contrast to this, the air was rapidly replaced by the eosin solution in the length of tubing placed vertically in the cylinder.

When this experiment was repeated, using contaminated catheters in place of the tubing, and mercury oxycyanide and Westcodyne in place of the eosin, the contaminating organisms were recovered in each instance. The tiny lumens of the catheters prevented the solutions from rising inside the catheters.

Studies were made to determine the effect of several sterilizing agents on the shellac of catheters. When catheters were immersed in mercury oxycyanide and Westcodyne for thirty days, no

*Roentgen equivalents physical.

effect was observed on the catheters in the mercury oxycyanide. However, the shellac on the catheters in the Westcodyne was softened. When catheters were sealed in cellophane envelopes and sterilized in the autoclave for twenty minutes at 121° C. and fifteen pounds pressure, no deleterious effect was found after twenty autoclavings. After this, the catheters deteriorated during the next two or three periods of sterilization.

Discussion

A delicate natural balance exists between the normal bacterial flora of a host and numerous pathogens or potential pathogens. When this balance is undisturbed, a symbiosis exists between the host and the normal flora in certain areas of the body. The pH of these areas is favorable for the maintenance of the normal flora, and at the same time the bacterial flora helps to maintain the pH. If this balance is disturbed by the administration of wide-range antibiotics, the pH may be altered with the resultant disappearance of the normal bacterial flora or the normal flora may be wiped out by the antibiotics with a resultant change in pH. Such changes make conditions favorable for the growth of organisms which are usually nonpathogenic. With the inhibiting effect of the normal flora removed and the change in pH, fungi, viruses and antibiotic-resistant bacteria grow rapidly and may become pathogenic.

A large percentage of the patients being cystoscoped have developed their infections because of obstructing lesions along the genitourinary tract or from ascending or blood-borne infections. A great variety of organisms is responsible for these infections, and, since the patients have been treated with sulfa drugs or antibiotics usually for considerable periods of time before cystoscopy, the causative organisms have become antibiotic resistant. When the patients are cystoscoped, the organisms are introduced into the catheters, which are then theoretically sterilized. If the sterilization process is not effective, the same organisms (*Mycobacterium tuberculosis* in some cases) are introduced into the renal pelvis of the next potential host. From this, it is obvious that sterile ureteral catheters are essential.

Apparently the main reason for the lack of sterilization in ureteral catheters is the failure of the sterilizing agent to reach the organisms. The catheter is a long, hollow cylinder and when it is placed longitudinally in a pan it can remain

there indefinitely without the sterilizing agent reaching the entire inner surface.

Two methods of sterilization produced sterile catheters: exposure to the electron beam of the van de Graaf and autoclaving. The van de Graaf machine is available only at the larger research centers, although exposure of catheters to gamma rays from the cobalt bomb is becoming increasingly available. No studies have been made as to the effect of this amount of radiation on the shellac of the catheters.

Sterilization in an autoclave is available in all hospitals. With this method, the catheters should first be cleaned by injecting distilled water through them to remove urinary sediments, blood clots and any other solids. The catheters are then packaged individually, with or without stylets, in cellophane or plastic envelopes. The packaged catheters are autoclaved for twenty minutes, the timing period being started after the pressure has reached fifteen pounds and the temperature 121° C. Since the catheters have been packaged individually before sterilization, they may be stored indefinitely before use without contamination.

In the past, the objection that autoclaving shortens the life of a catheter has been raised. If it does, the difference is not appreciable. Autoclaving is the one means of sterilizing which consistently produces sterile catheters, and in consideration of the patient it would be the only feasible one even if it meant an increase in cost to the cystoscopist. Disposable sterile catheters would offer another solution to the problem.

Roth et al⁴ have attacked this problem by mixing wide-range antibiotics in the retrograde pyelographic media and have concluded that Neomycin was the most satisfactory.

It is taken for granted that the rest of the equipment used at cystoscopy is cleaned and sterilized with cold sterilizing methods.

Conclusions

1. Present methods of sterilizing ureteral catheters are not completely satisfactory.
2. Alternate methods of sterilizing ureteral catheters are presented.

Acknowledgment

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(References on Page 244)

Abdominal Pregnancy

Report of Two New Cases

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WITH THE definite increase in ectopic pregnancies, it is almost inevitable that abdominal pregnancies will become more common. Because of the rarity of this condition in the past and because of its potential seriousness, it was thought important to review the literature relative to the clinical management of this condition so that maternal and infant mortality might be kept as low as possible.

It is of little value to attempt to determine the incidence of abdominal pregnancy. Few in the literature are in agreement. It will suffice to say that the condition at present is not common. It is generally agreed that most cases, if not all, are secondary to tubal pregnancies. The pregnancy apparently continues following either tubal abortion or tubal rupture.

The importance of making the correct pre-operative diagnosis cannot be overemphasized. Not to do so is to invite serious trouble. There are several salient features in the history. In a very large percentage of cases there occurs some type of abnormal uterine bleeding during the first trimester. More often this abnormality is in the form of oligomenorrhea. An important symptom is the history of a sudden episode of severe lower abdominal pain which subsides spontaneously in the first twenty-four to forty-eight hours. The onset of this pain is usually in the first eight weeks and probably represents the tubal abortion, and usually nausea and vomiting continue throughout pregnancy. Cramping abdominal pain is common through the entire gestation and becomes more severe with the movement of the fetus.

In many instances, fetal parts may be palpable very superficially, however this is not always the case. Many times there is sufficient tenseness of the fetal sac so as to give the examiner the same impression as that of a uterine fundus. It is not uncommon for "uterine contractions" to be present. Accurate bimanual examination is often dif-

ficult. With the presence of the large pelvic mass and the associated tenseness of the abdominal wall, the uterus, which enlarges to that of a two and one-half month gestation, is not easily or definitely outlined. An important diagnostic aid is the abdominal roentgenogram. The presence of a high breech or a high transverse with unusual skeletal distortion is essential to the consideration of the diagnosis. These positions occur in almost all reported cases. The inability to visualize the uterine wall radiologically is also important. The only absolutely diagnostic procedure is the hystrogram. Certainly no patient should undergo laparotomy, where this condition is suspected, without a hystrogram. The importance of establishing the diagnosis greatly overshadows any minimal risks involved in the procedure. In those patients who are seen at or near term, mild cramping pains simulating labor are quite common, and are exaggerated with fetal movement. It is not uncommon for patients to exceed forty weeks' gestation.

There is nothing in the literature to support the old idea that surgery should be done as soon as the diagnosis is made. Serious pre-operative complications with the exception of ileus, are quite infrequent. Surgical technical difficulties are no greater at term than at any other time during the pregnancy. There is no evidence to indicate that maternal mortality is increased by allowing the pregnancy to continue to term. Certainly infant mortality is decreased. A mother with an abdominal pregnancy at or near term has about a 25 per cent chance that the infant will survive and a 10 per cent chance that it will be completely normal.

The mother faces her greatest danger from hemorrhage. It is directly or indirectly responsible for nearly all cases of maternal mortality. One major cause of hemorrhage is the accidental cutting of the placenta during surgery. The most judicious incision is a paramedian incision on the side opposite the placental implantation. Incising the placenta is an accident of major proportions. Shock and death may rapidly ensue unless

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Fig. 1. Case 1. Note the high transverse position and the distorted appearance of the fetus.



Fig. 2. Case 1. The distortion of the fetus is apparent.



Fig. 3. Case 1. Hystero-gram taken preoperatively.

blood in large quantities is readily available and the source of bleeding rapidly brought under control. Another major cause of hemorrhage is the attempted removal of the placenta. Certain authors hold the view that the placenta should be removed if possible, however, the dangers involved in determining this fact are great. Some placentas have been removed successfully but many have not. Where the attempt has been unsuccessful it has resulted in serious consequences for the patient. Confronted with placental hemorrhage, hemostasis as rapidly as possible is essential. The most widely used methods have been packing, suturing and pressure. Where there has been an appreciable amount of placental bleeding there is the invariable development of postoperative pelvic abscess. If possible, cul-de-sac drainage is advisable. The preferred management of the placenta is to leave it *in situ*. The cord should be tied and cut as close to the placenta as possible and a primary closure of the abdomen without drainage be done. With this type of management an uneventful postoperative course is the rule. The placenta is subsequently absorbed although it may take from one to two years. Positive pregnancy tests persist from one to two months.

With emphasis placed on the necessity of the correct pre-operative diagnosis, with judicious management of the placenta and with the availability of blood, maternal mortality should be very uncommon and infant survival definitely improved.

Case Reports

Case 1.—A colored woman, aged twenty-seven, gravid 1, para 0, was first seen in consultation at about six and one-half months' gestation. She was supposedly in premature labor and was having irregular abdominal pain but no apparent progression of labor. Her last normal menstrual period was April 6, 1953. In both May and June she had scanty bleeding of two days' duration. Following this there was amenorrhea. Her menstrual history was as follows: onset at age eleven; occurrence every twenty-eight days; duration three to four days; menstrual cramps moderate. Her past history: pulmonary tuberculosis at age eleven, for which she was hospitalized for eighteen months, and discharged as cured. She underwent appendectomy in December, 1944. In June, 1953, at approximately eight weeks' gestation this patient had a sudden onset of sharp right lower quadrant pain which was associated with spotting. After twenty-four hours the pain subsided. The patient's major complaint since that time has been intermittent abdominal cramps. Prior to her admission to the hospital she had the onset of nausea and vomiting. On abdominal examination it was not definitely possible to outline a uterus nor were any uterine contractions palpable. The abdominal mass was 4 cm. above the umbilicus and her abdominal pain was synchronous with fetal movement. Palpation of the fetus gave the impression of its being very superficial. Fetal heart was of good quality. Rectal examination revealed no presenting part and no cervical dilatation. Abdominal pregnancy was suggested at this time and abdominal roentgenograms were taken (Figs. 1 and 2). The patient remained hospitalized for several weeks until her abdominal symptoms subsided, and was readmitted in November at about eight and one-half months' gestation for an elective laparotomy. Before surgery, however, a hystero-gram was done to confirm the diagnosis (Fig. 3). On Nov. 16, 1953, a laparotomy was done

with the delivery of a full-term female infant from the abdominal cavity. The infant failed to breathe and attempts at resuscitation failed. The placenta was attached to the region of the right broad ligament. The cord was tied and cut, the amniotic fluid was aspirated

March 2, 1955, a laparotomy was done and a living infant was delivered which survived for twelve hours. Prematurity was considered to be the cause of death. The placenta was found to be adherent to the region of the right broad ligament but extended to the anterior



Fig. 4. Case 2. Note the high transverse position.



Fig. 5. Case 2. Note the change of position into a high breech.

and the placenta was left intact. There was no placental bleeding and the abdomen was closed without drainage. The patient made an uneventful recovery and left the hospital on the eleventh postoperative day. She was seen in January, 1955, at which time her condition was good and the mass in the right adnexa was 3 to 4 cm. Autopsy showed that the infant had diffuse pneumonitis with aspirated amniotic fluid. The patient was again seen in December, 1956, at which time her menstrual periods were normal and there was no evidence of a pelvic mass.

Case 2.—A colored woman, aged thirty-one, para 3, gravid 5, had her last normal menstrual period on July 13, 1954 and her EDC was April 20, 1955. The patient was first seen on September 7, 1954, with what appeared to be a normal pregnancy, with some nausea and vomiting. Physical examination was negative and she gave no history of previous abdominal pain. She was not seen again until February 19, 1955, when she was thought to be in labor. Examination revealed a transverse presentation which was confirmed by x-ray (Fig. 4). After the "labor" stopped the patient was discharged from the hospital. She was readmitted on February 25, 1955, because of the recurrence of abdominal pain. At this time she also had severe anorexia and had lost seven pounds in six days. Hemoglobin was 9 gms. Following a blood transfusion, a hystrogram was done (Fig. 5), which confirmed the diagnosis. Two days after the hystrogram was made, the nausea, vomiting, and abdominal pain became severe and the patient developed abdominal distention. She improved following the passage of a long tube. On

abdominal and lateral pelvic wall. There were several areas of brisk bleeding from the placenta which had been accidentally cut. These areas were controlled by suturing, electrocoagulation, and oxycel pack. The abdomen was closed without drainage, and the patient was given 1,500 cc. of blood while in the operating room. Her postoperative condition was uneventful until the eighth day, when she developed a purulent-sanguinous discharge from one point in the incision. Through this fistulous tract there also was extruded pieces of oxycel. There was drainage for fifty-nine days, after which the tract gradually closed. Six months after the operation the patient was seen and her condition was good and she had gained thirty-seven pounds. A small adnexal mass was the only residue.

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list of both direct and indirect causes of obstetric death. The latter information coordinates the code numbering system of the "Standard Nomenclature of Diseases and Operations" with the categories established by the Sixth Revision of the International Lists of Diseases and Causes of Death.

AMA PREPARES NEW EXHIBIT ON DIGESTION

Plans are underway by AMA's Bureau of Exhibits for a new health education exhibit showing the anatomy and mechanics of digestion. Colorful three-dimensional anatomical models and drawings will give the lay person a good idea of the human digestive processes. This exhibit will be added to the existing list of displays on the human body, including "You and Your Body,"

"Your Bones and Your Muscles," "We See," "We Hear," and the ever-popular "Life Begins." The Bureau hopes to have this exhibit available for the forthcoming state and county fair season.

"HOME CARE" INFORMATION AVAILABLE FROM AMA

Because of increased interest among medical societies in organized "home care" programs—such as the one inaugurated by Montefiore Hospital (New York) several years ago—the AMA's Council on Medical Service recently undertook a study of existing programs throughout the country. The new study includes information on the organization, development, financing, medical services provided, and problems encountered in the various home care programs. Any medical society desiring further information should contact the Council.

Esophageal Hiatus Hernia

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RECENTLY we encountered several patients in whom it was extremely difficult to determine whether symptoms were due to hiatus hernia, to concomitant heart disease, or to other associated lesions of the gastrointestinal tract. Representative of such cases was that of a fifty-year-old lady with episodic attacks of severe epigastric and retrosternal oppressive pain radiating into the left arm, lasting a few hours, and not related to exertion or food intake. Following the first such episode, the patient had been hospitalized for several weeks with a diagnosis of myocardial infarction, although subsequent review of her electrocardiograms indicated that they were normal except for ventricular premature contractions.

Intensive study of this patient revealed only an esophageal hiatus hernia and a tendency for exercise to precipitate bigeminal rhythm due to ventricular premature contractions. Repeated serum amylase determinations during attacks and two cholecystographic studies were normal. Despite the postexertional bigeminy which suggests underlying coronary artery disease, we felt that the patient's difficulties were not primarily cardiac in origin, and when medical therapy of the hiatus hernia with small feedings, antispasmodics, and elevation of the head of the bed failed to relieve her symptoms, we advised surgical repair.

The hernia was successfully repaired through a transthoracic approach, but the patient's attacks of pain continued to recur. The gall bladder series was repeated again and cholelithiasis was found on this *third* examination. At subsequent laparotomy for cholecystectomy, chronic pancreatitis was evident. The patient's difficulties did not recur after cholecystectomy, and it seems clear that her attacks of pain were due to recurrent pancreatitis associated with cholelithiasis, that the bigeminal rhythm was reflex in origin, and that the hiatus hernia was merely an incidental and misleading finding.

This case emphasized for us the occasional falli-

bility of cholecystography in the diagnosis of gallstones and the difficulty of diagnosing chronic pancreatitis in the absence of calcification or other x-ray signs. It also taught us that, if faced with similar uncertainties in the future, we should insist on manual exploration of the upper abdomen prior to repair of the hiatus hernia.

Stimulated by this and similar experiences, we reviewed the hiatus hernias found at our hospital during the year 1954, to determine the incidence, the clinical features, the frequency of symptoms attributable to the hernia, and the frequency of associated lesions, to give us background data against which to evaluate subsequent cases.

TABLE I. AGE AND SEX INCIDENCE OF 224
HIATUS HERNIAS

Age:	Males (103) Females (121)	Range—31-82 years 29-81 years	Average—54.7 years 57.2 years
Incidence by decades:			
21-30 years			2 patients
31-40 years			20 patients
41-50 years			46 patients
51-60 years			81 patients
61-70 years			48 patients
71-80 years			24 patients
81-90 years			3 patients

Material

During 1954, the upper gastrointestinal tract was examined roentgenologically in 2,597 patients; 224 (8.6 per cent) were found to have esophageal hiatus hernias. These hernias may be classified on various bases: anatomic, etiologic, visceral content, et cetera. In our series, 216 were of the true hiatal type wherein the esophagogastric junction was displaced above the diaphragm; six were paraesophageal hernias wherein a part of the stomach slips through the hiatus alongside the esophagus while the esophagogastric junction remains subdiaphragmatic; in two patients the hernia was associated with a congenitally short esophagus. The hernias varied in size from a two centimeter pouch to almost complete paraesophageal herniation of the stomach, but the majority were from four to six centimeters in diameter.

The sex and age incidence of these 224 patients is detailed in Table I. The youngest patient was

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TABLE II. ASSOCIATED GASTROINTESTINAL LESIONS IN 224 PATIENTS WITH HIATUS HERNIA

<i>Upper Gastrointestinal tract</i>	
Normal	152
Peptic ulcer	42
Duodenal	35
Gastric	4
Esophageal	3
Diverticula	32
Duodenal	29
Esophageal	2
Gastric	1
Gastritis	4
Esophageal stenosis, achalasia, deformity of duodenum	1 each
<i>Lower Gastrointestinal tract (studied roentgenologically in 104 patients)</i>	
Normal	59
Diverticulosis	36
Carcinoma	5
Ulcerative colitis	2
Tuberculous ulcer	1
Irritable colon	1
<i>Biliary tract (studied by cholecystography in 71 patients)</i>	
Normal	52
Cholelithiasis	12
Non visualization	7

a twenty-nine-year-old woman who developed symptoms in the sixth month of pregnancy, and the oldest patient was an eighty-two-year-old man in whom the hiatus hernia was incidental to a carcinoma of the colon. There was no significant sex differential, and as might be anticipated, 90 per cent of the patients were over forty years of age.

A surprisingly high incidence of associated lesions of the gastrointestinal and biliary systems was found. These findings are tabulated in Table II. The frequent coexistence of hiatus hernia and diverticula of the duodenum and/or colon suggests that a predisposition to these lesions may reflect a constitutional defect in supporting tissues as well as an aging factor. This high incidence of concomitant lesions makes it difficult to determine which particular lesion is responsible for the patient's symptoms, if any.

Of the 224 patients, 158 were inpatients with complete clinical records available for evaluation of their complaints. Of these 158 patients, 105 were found to have other gastrointestinal disorders, heart disease, or diseases of other systems which satisfactorily explained their difficulties. In these patients, the hiatus hernia was considered an incidental finding, not contributing to the patient's illness. Undoubtedly in some of these patients the hiatus hernia did play a role in their complaints, but we could not separate this factor from the more prominent and more logically causative lesion.

In the remaining fifty-three inpatients, the hiatus hernia was believed by us to be the factor responsible for the patients' symptoms and find-

TABLE III. MAJOR COMPLAINTS IN 53 SYMPTOMATIC HIATUS HERNIAS

Pain	37
(a) Abdominal	29
(b) Chest	16
(c) Interscapular	9
(d) Shoulders	2
(e) Neck	2
Nausea and/or vomiting	25
Gastrointestinal bleeding	14
Heartburn	7
Dysphagia	6
Dyspnea with eating	5
Persistent hiccoughs	1

ings. There were no major age or sex differences between this group of fifty-three symptomatic hiatus hernias and the total group of 224. The major complaints in these fifty-three patients are listed in Table III, and are discussed in more detail below.

Symptoms

Pain was present in thirty-seven cases (70 per cent). The most common location of pain was in the epigastrium or retrosternal area, with the epigastrium more common in females and the retrosternal area in males. Interscapular pain and left anterior chest pain also was noted frequently. Radiation of the pain to the neck, shoulder, and upper or lower quadrants of the abdomen was not uncommon. The pain was described in most cases as burning in character, and varied in severity from mild discomfort to severe disabling distress. Upper abdominal fullness or bloated sensation frequently accompanied the pain. The pain was occasionally colicky but more often nonremittent, lasting from a few minutes to several hours, often precipitated by eating or starting one to two hours postprandially, and varying in severity with changes in position. The classic pattern of pain developing with or aggravated by recumbency with relief in the upright position occurred in nine of the thirty-seven patients. In one patient a reverse pattern was noted, with pain being relieved by recumbency.

Nausea and/or vomiting occurred in twenty-five patients (seventeen women and eight men), usually postprandially and usually in association with pain. In only two patients was the nausea and vomiting so severe and persistent that it was the primary reason for hospitalization. Vomiting often produced relief of pain.

Gastrointestinal bleeding attributable to the hiatus hernia occurred in fourteen patients of the fifty-three (26 per cent). Bleeding occurred with equal frequency in both sexes, seven males and

seven females. In six patients, five of whom were males, hematemesis was prominent; in five patients, four of whom were females, bleeding was manifested by melena; in one patient melena and hematemesis occurred simultaneously. One patient had occult blood in her stools; and another patient had a moderately severe anemia secondary to chronic blood loss. This rather high incidence of bleeding surprised us, particularly in view of the fact that in only two cases was the bleeding associated with demonstrable ulceration, one exhibiting an ulcer of the lower third of the esophagus and the other with an ulcer in the herniated portion of the stomach. In the remaining twelve cases, bleeding probably arose from superficial erosions in the herniated portion of the stomach or in the esophagus where it is subjected to pressure effects and to the regurgitation of gastric contents through an incompetent cardia. We are unable to account in any logical fashion for the apparent predilection of males to have hematemesis and females melena, and we believe it is probably a fortuitous occurrence associated with the small number of cases. It interested us to note that six of the patients with bleeding had no other symptoms related to the hernia.

Heartburn was a major complaint in seven patients, five of whom were women. Heartburn is a difficult symptom to evaluate since the term has varying connotations to different patients; it probably occurred in many more patients in this group, in some of whom it was probably disregarded and in others overshadowed by pain.

Dysphagia occurred in six patients, three men and three women. The sensation of dysphagia may be referred to the retrosternal area, the xiphoid, or to the left infraclavicular area. It occurred most commonly with solid foods, but occasionally even with liquids.

Dyspnea with ingestion of food occurred in five patients (two men and three women). At first thought, it might seem that the dyspnea could be explained on the mechanical basis of interference with the ventilatory function of the lung by displacement due to hernia; however, we were unable to demonstrate any correlation between the size of the hernia and the occurrence of dyspnea, and we feel that probably some reflex mechanism which we cannot yet define is operative.

Persistent hiccough was responsible for hospital admission in one patient. The hiccoughs subsided

following a phrenicclasis. In another patient, there was a history of persistent hiccough ten years previously also responding to phrenicclasis, but we were unable to determine whether the hiccoughs were related to the hiatus hernia at that time.

Comment

Surgical repair of the hernia was performed in eleven of these fifty-three patients (21 per cent); two repairs were prompted by severe bleeding, one by esophageal ulcer, one by esophageal stenosis, and one by lodging of a meat bolus in the hernia pouch. The remaining six patients subjected to surgery probably represented failure of medical management. In one patient, the hernia recurred following surgical repair.

The accepted medical management for hiatus hernia consists of smaller, more frequent meals, elevation of the head of the bed, weight reduction where indicated, antacids and antispasmodics for symptomatic relief, sedation, elimination of smoking and other irritant factors when necessary. This regimen is successful in effecting relief from symptoms in most cases.

The only complications encountered in our series were three cases of esophageal ulcers, one of gastric ulcer in the hernia pouch, one of esophageal stenosis, and one of impacted foreign body (meat bolus) in the pouch. We had no cases of perforation or incarceration.

As noted previously, we were impressed particularly with the following features in this series.

1. The relatively high incidence of esophageal hiatus hernia.
2. The high incidence of associated lesions of the gastrointestinal tract, which makes differential diagnosis sometimes exceedingly difficult.
3. The high incidence of gastrointestinal bleeding as a major manifestation of hiatus hernia.
4. The success of medical management in most cases of hiatus hernia.

Summary

1. Two hundred and twenty-four cases of hiatus hernia were studied with reference to age and sex incidence, and the incidence of associated lesions of the gastrointestinal tract.

2. Of this group there were fifty-three patients with symptoms referable to the hiatus hernia. The symptoms and their frequency are presented.

What's New in Drugs?

Fredrick F. Yonkman, M.D.

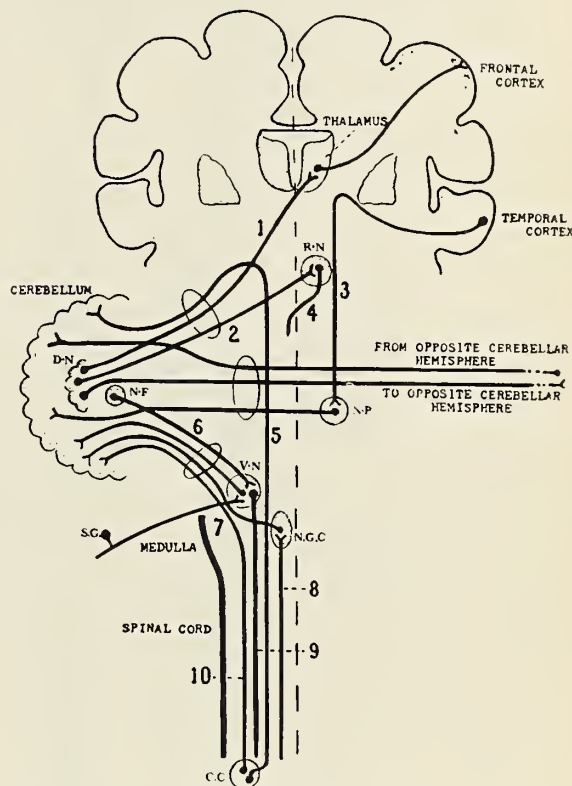
Summit, New Jersey

"MAN is fearfully and wonderfully made" said the psalmist¹ many years ago. How true. Even as I stand, in this discussion with you today, I am charged with electrochemical impulses, most of them quite well mediated and directional, leading to some end result. Proprioceptive impulses are traversing sensory pathways from my muscles and tendons, up and across specific spinal and cerebellar pathways, and after central mediation with all that such implies, they are returning through spinal motor columns to effector nerves, thence back to certain antagonistic or opposing muscles, thus to permit me to remain in some semblance of balance. The effect of space and position upon the semicircular canals of the inner ear, as well as the effects of light upon the rods and cones of the retina with their specific and respective pathways, cranial nerves VIII and II, add to the complicated picture² (Fig. 1) of maintaining this sense of balance. And then when one realizes the strange biochemical and electrical natures of living functional tissues, one appreciates the real depth of the psalmist's statement, "Man is fearfully and wonderfully made." This recently has been said somewhat differently by Rodbard and Katz³ with special emphasis on cardiovascular regulation.

"If all the vascular beds of the body were to open simultaneously to their full capacities, the total peripheral resistance would disappear and the cardiac output would be swallowed up, leaving no trace of an arterial pressure. In order, therefore, to permit the circulatory pumps and vessels to carry out their proper functions, most of the blood vessels of the body must be partially or even severely constricted a great deal of the time. To accomplish this, vasoconstriction must be balanced neatly against vasodilatation, with both attuned to cardiac output and to tissue needs.

"The control of the degree of vasodilation of the blood vessels is achieved primarily by the interplay of peripheral mechanisms. These include the effects of metabolic vasodilators, produced by muscles and other working tissues, which act directly or through axone reflexes. These local mechanisms are supplemented by a system of efferent vasodilator nerves transmitting messages from the central nervous system. When these vasodilator influences are unchecked, a state of vascular collapse and shock may ensue.

"Against these tendencies, a group of powerful vasoconstrictor mechanisms is available and in constant function. Their role is to reduce unnecessary blood supply to tissues. This vasoconstriction is guided by an hier-



Best and Taylor, 2nd Edition, p. 1500, 1939

Fig. 1.

archy whereby certain favored organs insure their own blood supply, particularly the brain, the heart and the kidney. The control of the degree and sites of vasoconstriction, depends predominantly on the action of the central nervous system and the influence of hormonal action including the permissive effects of the steroids and other substances. The relative distribution of the cardiac output to the various organs is influenced by the vasomotor center of the medulla oblongata, which responds to impulses from all the tissues of the body, including the other portions of the brain itself. This center therefore ultimately sets the appropriate level of systemic blood pressure. This control can best be illustrated by considering some of the driving forces of vascular regulation."

What a wise fellow, that psalmist!

Astounding it is that at times we seem to be just so many automatons (Fig. 2), controlled by set reflex patterns many of which regulate purely vegetative or autonomic functions. One glance at a diagrammatic sketch of the autonomic nervous

Many clinical conditions observed in the circle of one's own relatives and friends soon convince one that the psyche frequently has powerful control over the soma (Fig. 4) as for example, Hirschsprung's disease, migraine headaches and neuro-

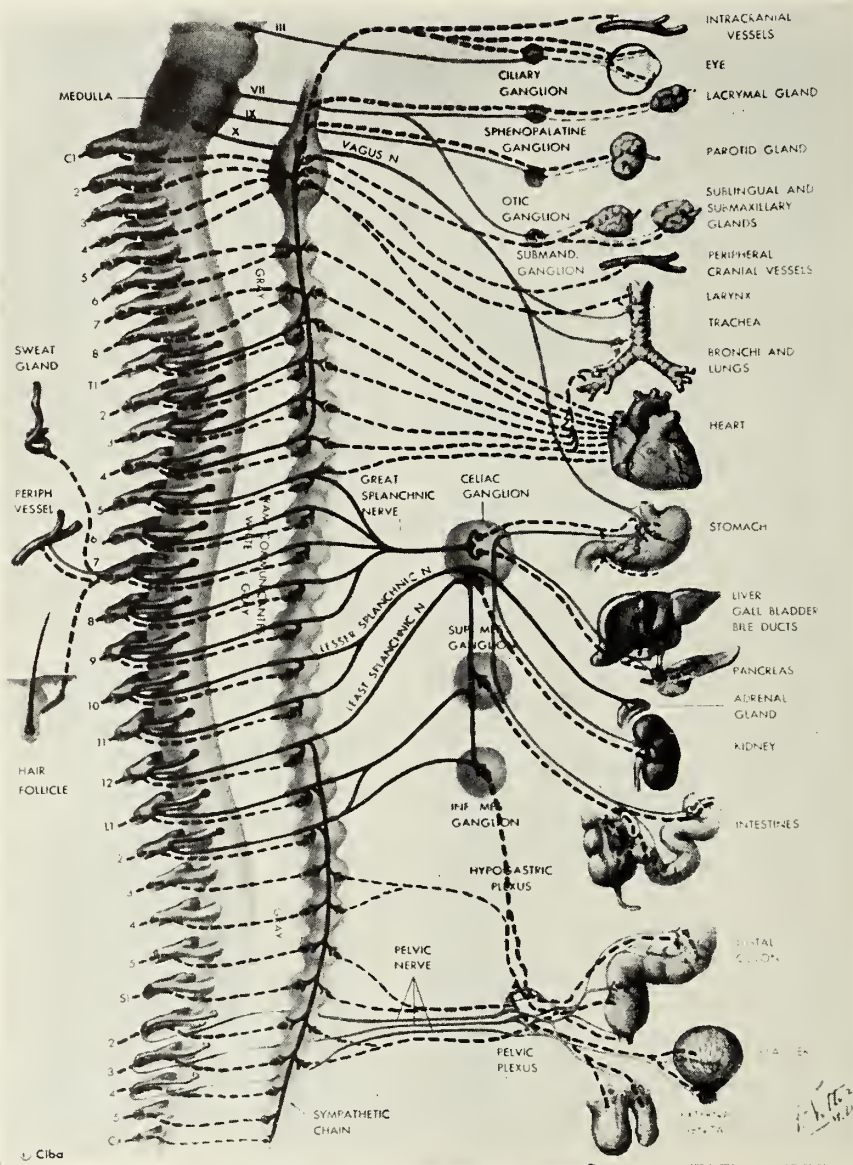


Fig. 2. Autonomic nervous system.

system lends confirmation to this statement. Note the superimposition of the brain with its autonomic capacities (Fig. 3), but under potential influence by higher and finely integrated cerebral processes which may affect psychosomatically those end organs under the control of the autonomic nervous system, either for better or for worse.

genic hypertension, peptic ulcer and irritable colon, as well as Raynaud's disease with cold hands and feet. How could one be other than greatly impressed with the autonomic nervous system as being associated etiologically, at least in part, with some of these clinical conditions. The importance of these autonomic dyscrasias is

probably best portrayed by the plethora of stimulants and depressants of both the sympathetic and parasympathetic portions of the autonomic nervous system. And this leads me directly to today's assignment.

ADRENERGIC CONTROL

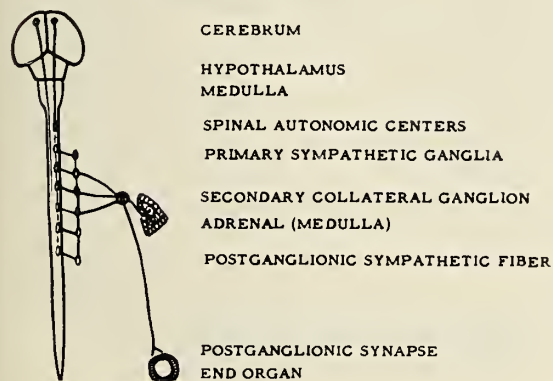


Fig. 3.

The topic selected for me was "What's New in Drugs, 1956" but after I received a preliminary copy of the program, I read the following: What's New in Lung Cancer?; New and Old Methods of Managing Burn Wounds; Diuretics and the Treatment of Congestive Heart Failure; Clinical Evaluation of Sinthrom, a New Oral Anti-coagulant; What's New in Vitamin and Hormone Treatment of Arthritis?; Rauwolfia in Hypertension; What's New in Diabetes?; What's New in Antibiotics?; What's New in Cerebral Palsy?; What's New in Pediatrics?; Tips on the Treatment of Skin Diseases; What's New in Ulcerative Colitis?; and A New Approach to the Clinical Management and Treatment of Behavior Problems.

All of these topics, being handled by experts, I naturally had little hesitation in asking Dr. Hull and Dr. Foster for permission to gear my remarks in a vein other than that originally anticipated, namely—how do we get something new in drugs; how do they come into being and into rational use.

In this regard, the greatest requirement at the experimental and the clinical level is careful observation, more observation and still more observation, followed by association, and I should like to give you a few illustrations of pure accidents leading investigators to important applications of their observations. In most instances our drugs, as you and I know them today, came to

us by accident rather than by intent, that is, chemical compounds were often made not because they were intended to attack certain organisms or specific diseases but with the hope that they *might* do so and in a favorable vein. Then

Peripheral vascular disease

Arterio-obliterans	Lymphedema
Diabetic gangrene	Post-traumatic edema
Thrombo-angiitis obliterans	Frostbite
Raynaud's syndrome	Scleroderma
Livedo reticularis	Endarteritis
Acrocyanosis	Herpes zoster
Causalgias	Post-herpetic neuralgias
Trench and immersion foot	Popliteal aneurysm and embolism
Thrombophlebitis	Dysmenorrhea (neurospastic)
Acute ischemia (polio)	

Hypertension

Cerebral "accidents"

Thrombotic and vasospastic

Fig. 4.

too, the use of a certain compound or drug for one indication often led to another use, because some investigator had made a pertinent observation of an unanticipated action of that compound. And that is one of the chief reasons why this game of developing new drugs becomes so intriguing and fascinating, and likewise rewarding. In this country it is most gratifying that those of us in the laboratories have the splendid co-operation of scientifically minded physicians at the bedside. This avenue of co-operation is not one-way, it is two-way, for not only is the clinician willing to test developments of the laboratorian's dreams but the clinician very often finds a laboratorian who is most eager to co-operate with him to test the basic features of some important observation made in the clinic.

And here we come back to the simple but powerful word—*observation*, the basis of all research. Well do I recall the encouraging advice of my first graduate preceptor, Dr. Wilbur W. Swingle, then at Yale and now at Princeton, who said, "Young man, you don't have to know everything to do successful research. When you add two and two and get five, and then *wonder why*, you are on the road." *Why* did the unanticipated appear; what might be its meaning; in other words, observation leads to investigation, and intense reinvestigation often leads to basic principles and their application to man's welfare.

Well do we recall when our laboratory associates were first working with one of the pure alkaloids of Rauwolfia, namely reserpine, in an attempt to study its antihypertensive effects. Such



Fig. 5.



Fig. 6.

studies were made in anesthetized animals and later in unanesthetized monkeys. When one observed a condition of anger and probably fear (Fig. 5) change to one of nonchalance (Fig. 6), (or what would you call it—perhaps disinterested complacency?), you may well imagine that the efforts of workers⁴ in our laboratories were re-directed toward those changes observed after Rauwolfia in the clinic as cited by Dr. Wilkins,⁵ “. . . and Rauwolfia 1 tablet a day. Even after discussing her husband, her blood pressure was only 160/100. The patient remarked frequently on her symptomatic improvement, and ‘change in personality.’ When quizzed about the latter she said, ‘I am not less ambitious, I’m not less aggressive, I’m not less effective. I just don’t seem to have to do the things I used to. Before, I felt I had no control over myself, I had to do things. Now I don’t care, I don’t even notice things. Dust doesn’t annoy me now. Before, I knew it wasn’t important, but I had to clean it up. Now I let it go for 2 weeks, and it doesn’t bother me.’ ”

As Dr. Wilkins also said, good-naturedly yet no doubt with sincerity, to his Boston medical friends, “Rauwolfia is good psychotherapy in pill form.”⁶ So you see, careful observation led us all from one field, namely, antihypertensive capacities of this botanical contribution to that of modulation of symptoms of anxiety and tension in the mentally ill.

Another experimental observation made in the laboratory while Rauwolfia and reserpine were being studied was that of bradycardia which usually accompanied this drug-induced hypotension. This desirable feature of reserpine’s action was soon applied by various clinicians to modulate or antagonize the tachycardia produced by certain antihypertensive agents such as hydralazine, thus permitting not only more comfort for the patient during hypotension but reduction in dosage of that agent, hydralazine, which had induced the tachycardia.

It was also early observed in the laboratory that reserpine increased gastrointestinal motility of various experimental animals; this knowledge alerted interested clinicians to potential undesirable and desirable side effects to be anticipated in their patients; in other words, diarrhea could be severe, but, on the other hand, modified dosage might be of real advantage⁷ to the patient with a sluggish gastrointestinal tract.

Another most important example of the value of careful observation concerns the field of corticosteroids. You well know the story. May I pose a few questions from which you may draw your own conclusions as to whether drugs are discovered by accident or by intent. So many of our modern day developments in any line, but especially in science, specifically in medicine, are circumstantial. For example, would we be using cortisone, hydrocortisone and prednisone today

in the treatment of rheumatoid arthritis if Hench, the clinician, and Kendall, the biochemist, had not been at the Mayo Clinic at the same time? What if Hench had not been desperate for something, anything for that matter, for his arthritic patients? Where would we be if Kendall had not much earlier isolated and described his Compound E, thus permitting the excellent chemists of Merck & Company of Rahway, New Jersey, to make working amounts of this material which was so difficult to prepare? What might have happened if Hench and Kendall had decided to give less than the unknown, guessed at, effective amount of 100 mg. per day for a few days? In his Nobel lecture⁸ Hench stated: "Dr. Kendall and I decided to use for this first rheumatoid patient daily doses of 100 mg. intracutaneously, so that we might not commit the error of underdosage." He continues, "Thus, on September 21, 1948, Dr. Slocum began to administer to the above-mentioned patient daily doses of 100 mg. of Compound E in the form of a crystalline suspension in saline solution. Within three days the patient was markedly improved and continued to improve until the daily dose was reduced to 25 mg." What if the dosage regime had been reversed? It is reasonable to believe that there might not have been any favorable results to report with Compound E in rheumatoid arthritis, and Hench and Kendall and Reichstein might never have won the Nobel Prize.

And as to subsequent developments in this field, where would we have been if it were not for Dr. George Thorn's eosinophilia test,⁹ for you will recall that this simple test, performed in man but now also in the lowly white mouse, was the chief factor in arousing the keen interest of the scientists at Schering in those steroids now known as prednisone and prednisolone. Had these two valuable steroids not suppressed the eosinophils in laboratory mice according to Thorn's technique, I wonder whether they would have their current well earned reputation.

Circumstantial you say—why not? Would we have had insulin as early as 1923 if Drs. Banting and Best had used only six or eight dogs instead of dozens? For you well recall Paul DeKruif's accurate account¹⁰ that no favorable hypoglycemic effects had been observed with the Toronto pancreatic extracts until dozens of animals had been carefully studied. Well, you say, if insulin had not been discovered by Banting and Best, then

probably it would have been by Murlin of Rochester or by dozens of other investigators the world round. How true; but how many diabetic lives might have been lost in the interim, had it not been for a few extra dogs in Toronto?

Appropriate to our theme, namely, the importance of observation, one might recount the details of many valuable experiences such as Dr. Withering and his curious interest in his neighbor's purple foxglove (*digitalis*) for dropsy; the development of cocaine as a local anesthetic because of the observations of certain Jesuit priests in the indefatigability of pack runners in the Andes; of Domagk of sulfa drug fame, because of his mundane screening studies to determine any potential antibacterial effects of hundreds of compounds which apparently were good for nothing except as dyes or intermediaries for the production of dyes; of Fleming's innate curiosity in a contaminating mold during his studies of *Staphylococci* leading him to the development of penicillin, the forerunner of all subsequent antibiotic agents now in medical use.

Yes, there are many other illustrations of the importance of observation. One of the most fascinating was recently cited by Dr. Fabing¹¹ of the Christ Hospital, Cincinnati, in his address at the meetings of the American Pharmaceutical Manufacturers' Association held in New York last December. He said:

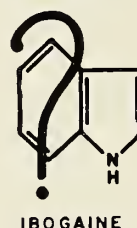
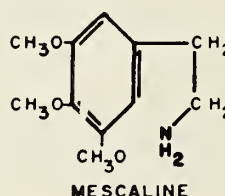
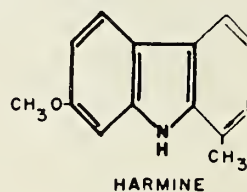
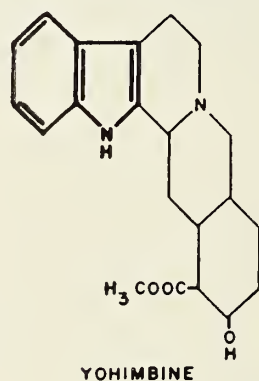
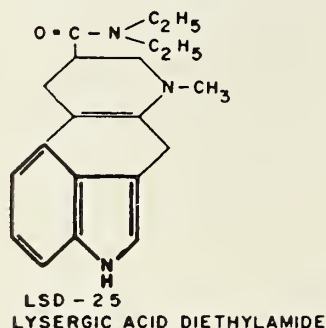
"Hoffman, working in the Sandoz Laboratories in Basle, Switzerland, sucked up something in his mouth from a pipette. He had been working with ergot extracts, and was making esters of one of its components, lysergic acid. In less than an hour he was muddled, confused and hallucinated. Frightened, he left the laboratory and got on his bicycle. He pedaled what seemed like 5,000 miles to his home which was in reality only a short distance away, but he had lost time and space perception. He called his doctor who managed to get him to gulp down all the milk in the house, but his psychotic state persisted until he fell into a fitful sleep late that night. Four days later he returned to his laboratory, looked over his notebooks and decided that he had swallowed the dextro-rotatory diethylamide of lysergic acid. Gingerly he measured out a very minute amount of the material and took another swallow. The psychosis returned, this time worse. He pedaled 10,000 miles home, and again drank all the milk in sight, to no avail. Thus LSD-25 was born (Fig. 7).^{*} Here was an experimental way of producing a psychosis which had very much the

^{*}Other important hallucinogens of plant origin are included in Figure 7, as are those of animal origin in Figure 8.

look and feel of schizophrenia. It takes about one-seven-hundred-millionth of a healthy young man's weight of this material to produce a model psychosis of five to ten hours.

One thing leads to another; observation, association and frequently circumstance lead to new developments of drug usage. For example, Fabing continues:

HALLUCINOGENS OF VEGETABLE ORIGIN



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Fig. 7

"The minuteness of the dose and the magic of its effects have been tested and retested all over the world. One would have to be a stick or a stone not to have his imagination completely captivated by the drama of an LSD psychosis. Hoffman's observation has fired clinicians, chemists, enzymologists and pharmacologists into new activity everywhere. It has caused us to take a new look into old things."

Fabing, however, also looked into new things and it is fortunate that he did. One of these new things was a chemical made by the Merrell Company of Cincinnati, called Frenquel. Many of you are familiar with it. Its formula is shown in Figure 9. Oddly enough, Frenquel will antagonize or negate that chemical psychosis induced by LSD-25 which is a schizophrenic type of syndrome¹² and it was on this basis that Fabing employed Frenquel with dramatic results in some of his hospitalized patients with psychotic manifestations. In this regard his presidential address in *Neurology*¹³ is most delightful reading.

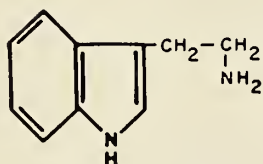
"One day I was sitting in my father-in-law's hospital room forty-eight hours after he had undergone a prostatectomy. I had just come downstairs from where we had been doing a mescaline experiment. Suddenly I realized that my father-in-law was talking just like the mescaline subject had been doing upstairs. He was disoriented, confused, frightened and hallucinated. He had sensations of levitation as though he and his bed were slowly swinging through space, and he complained of being bitterly cold. His post-operative confusion became worse as I sat there, and when he tried to climb out of bed and pull out his catheter, I realized that something had to be done. It was so like the mescaline reaction! Why not try Frenquel. I gave him 50 mg. of the drug intravenously and watched his psychosis melt away during the next half hour."

"This" says Fabing, "has launched us on an inquiry into post-operative psychoses. Frenquel has been almost uniformly good in relieving approximately seventy-five cases of this type. Proctor at the Bowman-Gray School of Medicine in Winston-Salem has relieved sixteen of nineteen cases of delirium tremens quickly with Frenquel. Senile patients often go through troublesome confusional periods. Frenquel has helped us with these on many occasions too. Our best friends in this have been the

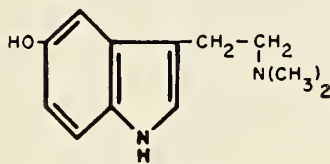
nurses. They run a quieter hospital and require less restraint for disturbed patients. We are enjoying a popularity with them which we never had before. One nice advantage of this drug is that it produces no side-reactions."

treatment of certain psychiatric patients. Then how come its large usage in this area today? Purely because of observation and step-by-step development. For example, chlorpromazine, a

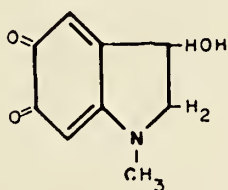
HALLUCINOGENS OF ANIMAL ORIGIN



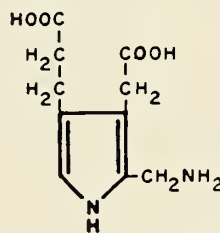
TRYPTAMINE



BUFOTENINE



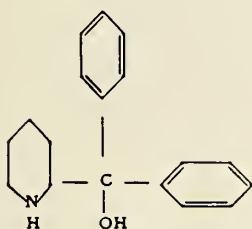
ADRENOCHROME



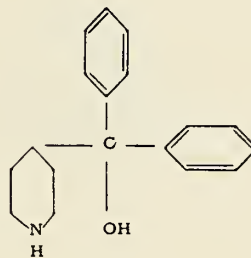
PORPHOBILINOGEN

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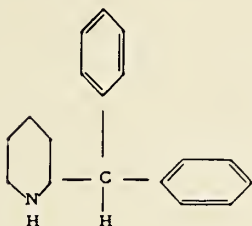
Fig. 8.



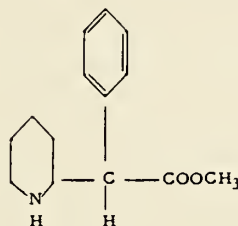
alpha Meratran
Alpha (2-piperidyl) benzhydrol



gamma Meratran
Alpha (4-piperidyl) benzhydrol



Ba-14469
2 Diphenylmethyl piperidine



Ritalin
Phenyl-piperidyl-(2)-methylacetate

Fig. 9

And then, how about chlorpromazine? How did this new drug come about? When first made as a chemical compound (Fig. 10) it was never intended that it should be of real value in the

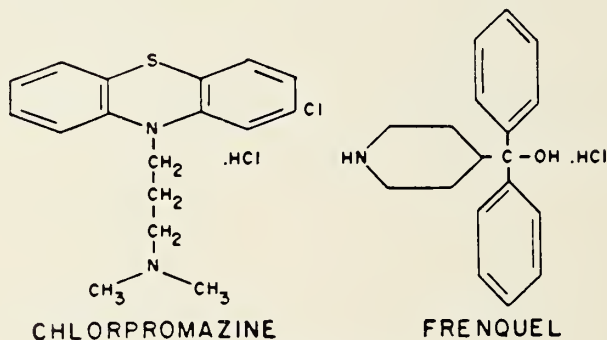
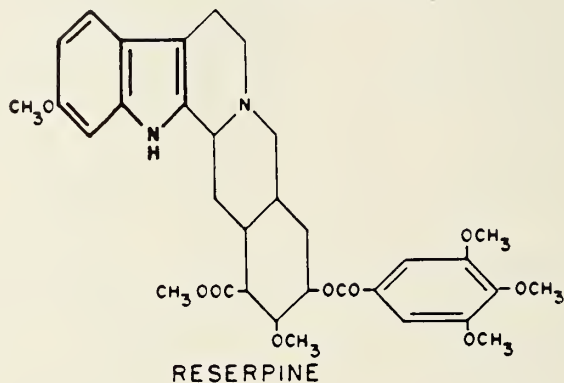
chemical relative of Phenergan,[®] was intended to be used as an antihistaminic drug. It reduced body temperature when given in a large dosage, and for that reason Laborit¹⁴ a French surgeon,

made up his so-called "lytic cocktail" to produce, as he termed it, artificial hibernation with or without the use of ice packing for the reduction of body temperature for certain surgical proced-

cal compounds, the result of which was the clinical use of Equanil® or Miltown.®

Now one more example before concluding. A series of interesting observations led to the devel-

THE ATARAXICS



Neurology 5:9; page 609, 1955

Fig. 10.

ures. During recovery, this type of patient was often very calm and quieted but definitely alert. This led other investigators¹⁵ to study the so-called psychic effects or phrenotropic features of chlorpromazine, and can't you now imagine the furious activity going on in many laboratories and clinics in restudying some of the old, never introduced, antihistaminic agents for phrenotropic properties? Who knows but what some derivative of Benadryl,® Pyrrolazote,® Chlor-Trimeton,® yes, even Pyribenzamine,® might find its way into the successful treatment of the anxious or the severely mentally disturbed patient either from a prophylactic or corrective point of view.

More recently considerable attention has been paid to the "relaxing" effects of mephanesin (Tolserol®); while this drug relieved skeletal muscular spasm, it simultaneously ameliorated and associated anxiety and tension in many cases. This observation led to further study of related chemi-

cal compounds, the result of which was the clinical use of Equanil® or Miltown.®

Now one more example before concluding. A series of interesting observations led to the development of a new compound, methyl-phenidylacetate (Ritalin®). In narcotized animals Meier et al demonstrated that it shortened the period of narcosis while in normal animals it increased their activity.¹⁶ In unanesthetized dogs orally treated for months with daily doses of reserpine resulting in marked sedation and droopy nictitating membranes, this stimulant, thirty minutes after oral ingestion, caused a retraction of the nictitating membrane (Fig. 11) and an alert animal without elevation of blood pressure.¹⁷ This type of analeptic activity led to its clinical appraisal, and the pioneer in this area of activity is Dr. John T. Ferguson of the Traverse City State Hospital. His is the first clinical report on this interesting chemical which was presented a year ago in February, 1955, before that august body, the New York Academy of Sciences.¹⁸ He vividly demonstrated the unique analeptic properties of this drug not only in primary depression

EFFECTS OF RESERPINE AND RESERPINE + RITALIN ON THE BEHAVIOR, BLOOD PRESSURE AND EYE OF THE UNANESTHETIZED DOG.

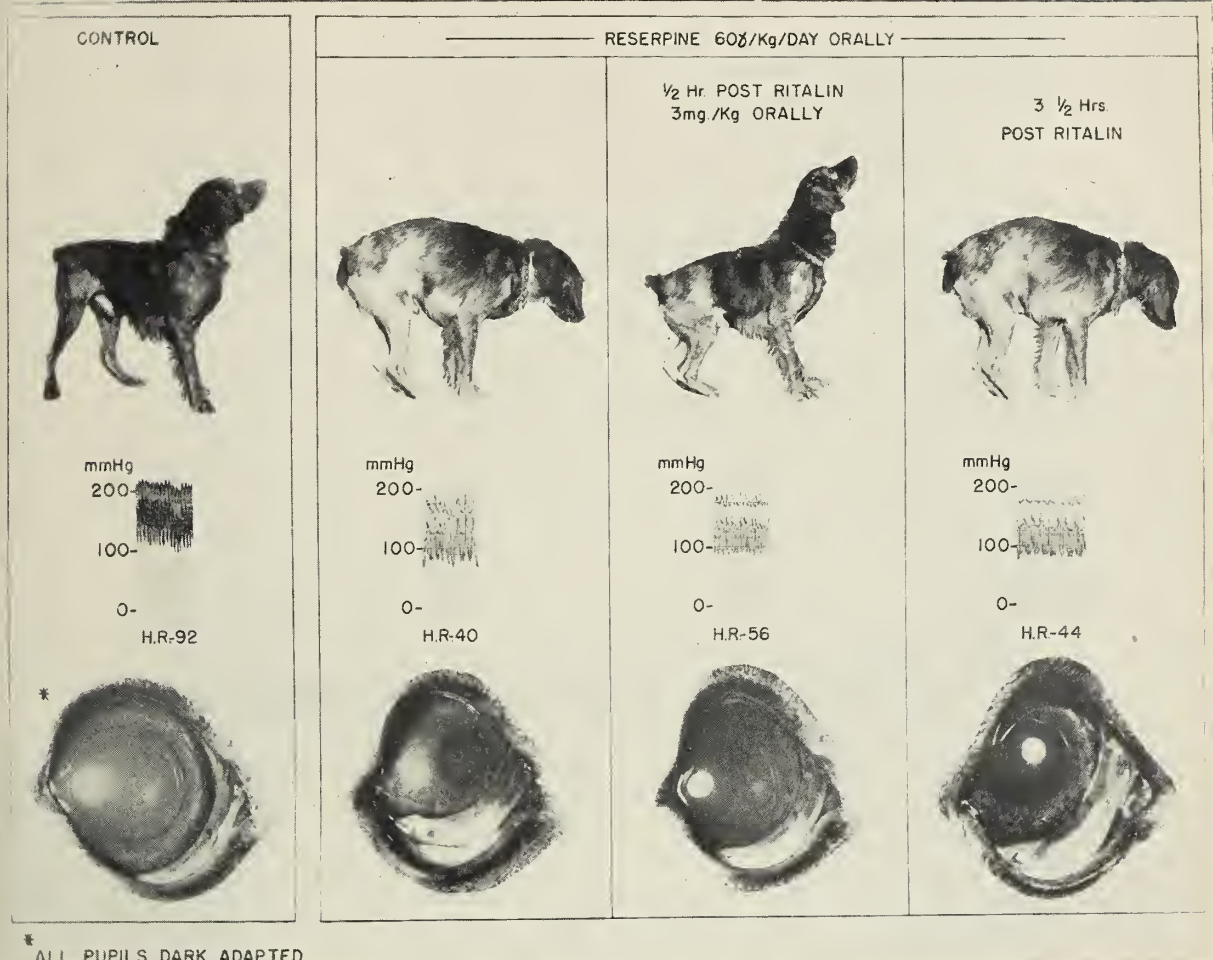


Fig. 11.

per se but also as an antagonist of the depressant and other undesirable side reactions of reserpine* and chlorpromazine.** His amplified report of these studies you may have read in the *Journal of the American Medical Association*;¹⁹ it was this report in exhibit form at the Boston meetings of the Midwinter AMA sessions last November which prompted the keen interest and commendation of that esteemed expert on rehabilitation, Dr. Howard Rusk of New York City.

Mental illness represents disturbed neurobiochemistry; certain biochemical reactions to various chemical stimuli are illustrated (Figs. 12 and

*For a vivid account of personal experiences in this regard may I suggest that you read DeKruif's presentation as given before the October meeting of the New York Academy of General Practice²³; it is delightful!

**Ayd²⁴ confirms these findings except for the "depressant" effects being antagonized.

13) in this instance²⁰ by the interrelationship of reserpine, serotonin and methyl-phenidylacetate. In an anesthetized animal, the rise in blood pressure following serotonin is augmented by methyl-phenidylacetate but in turn this is diminished or nullified by the reserpine molecule. If Gadum's suggestion²¹ be true, and this seems to have gained support from the work of Brodie,²² serotonin or 5-hydroxy tryptamine as it normally occurs within our systems may be associated with if not directly responsible for certain schizoid symptoms or manifestations. These, likewise, in turn can be modified by various chemical molecules such as reserpine, chlorpromazine, Frenquel or Ritalin and perhaps hosts of other chemicals still to be studied. In all these studies, and especially in this important field of the mentally

ill, which is now Public Health Problem No. 1 in our country, the importance of meticulous observations cannot be stressed too strongly, for what may seem to be only a very minor event, as

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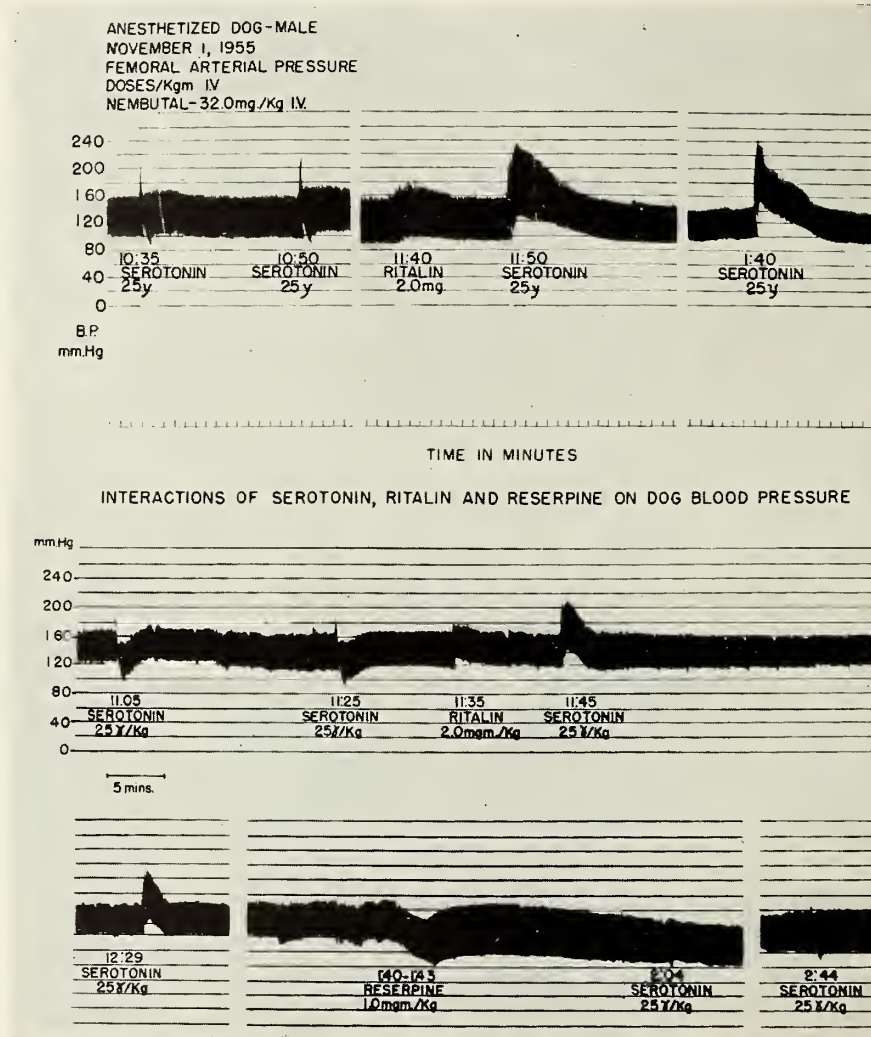


Fig. 12 (above). Fig. 13 (below).

observed during initial or preliminary studies, may become of major moment or import when applied to the clinical subject. Your valuable clinical co-operation with your co-workers and with ours in various scientific laboratories will result, without a doubt, in better health for our fellow men, provided, however, that after "we add two and two to get five instead of four, we continue to wonder why!"

Dedication

This paper is respectfully dedicated to our esteemed friend and associate, Professor Rolf Meier, Manager, Ciba Limited, Basle, Switzerland, on the occasion of his 60th birthday anniversary, April 7, 1957.

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(Continued on Page 233)

Lung Function in Asthma and Emphysema

By William Appel, M.D.

Kalamazoo, Michigan

IN BRONCHIAL asthma the vital capacity,[†] one second vital capacity,[‡] maximum breathing capacity,* and the expiratory flow rate,** are decreased in proportion to the severity of the disease. The residual volume[§] is increased. Following an injection of epinephrine (usually 0.25 cc. of 1:1000 dilution is used) or inhalation of Isuprel,[®] there is an increase in the vital capacity, one second vital capacity and maximum breathing capacity. Pulmonary infection (bronchitis, et cetera) if present will decrease the degree of improvement in the above lung function tests following the use of bronchodilators.

In pulmonary emphysema, depending upon the severity of the disease, vital capacity, one second vital capacity and maximum breathing capacity are also decreased. The residual volume is increased. With the use of bronchodilators (epinephrine injection, inhalation of Isuprel) there is little or no change in these lung function determinations.

The amount of work which an individual with emphysema has to do in order to merely breathe is considerably increased as compared with the normal individual, and he expends a greater amount of oxygen than the normal individual in order to breathe.

[†]*Vital capacity*—The maximum amount of air which can be exhaled after taking the deepest breath possible.

[‡]*One-second vital capacity*—The amount of air which can be exhaled in one second after taking the deepest breath possible. This figure normally is at least 80 per cent of the vital capacity.

**Maximum breathing capacity*—The maximum amount of air which can be inhaled in a given unit of time, usually twenty to thirty seconds.

***Expiratory flow rate*—The rate with which air is exhaled.

§*Residual volume*—The volume of air remaining in the lungs after the deepest exhalation.

Normally ventilation is so regulated that the oxygen tension in the alveoli and in the arterial blood is maintained at 100 mm. of mercury and the carbon dioxide tension at 40 mm. of mercury. In the emphysematous person, depending upon the severity of the disease, this oxygen-carbon dioxide ratio is disturbed and the oxygen tension may go as low as 40 to 50 mm. of mercury and the carbon dioxide tension to 90 to 100 mm. of mercury.

While in emphysema the one second vital capacity is reduced, in mitral valvular disease it remains normal, i.e., over 80 per cent of the total vital capacity, although the total vital capacity may be reduced in the latter disease.

Ordinarily, in persons with pulmonary emphysema there is no secondary polycythemia. The hemoglobin content of the arterial blood is not increased, although the size of the red blood cell and the mean corpuscular volume do increase. When there is marked polycythemia, there is usually chronic right ventricular failure with cor pulmonale and pulmonary arteriosclerosis.

While the material in this brief article is obviously not original, an attempt has here been made to state concisely certain consistent findings with regard to lung function tests (vital capacity, timed vital capacity, maximum breathing capacity, et cetera) in asthma and emphysema. These tests are easily performed, can be made available in hospital laboratories if physicians will employ them, and furnish very valuable objective information with regard to the state of lung function in asthma and emphysema and the degree of improvement achieved by our medical treatment in these diseases.

However successful our treatment of tuberculosis in children and young adults may be, unless we control the disease in the higher age groups we shall be a long time reducing the incidence of the disease in the population. The active cases in elderly men and women are going to form the hard core of infection in the community that may give rise to local epidemics of

acute cases among the young contacts. It behooves us, therefore, to discover, treat, and if necessary isolate these dangerous old men and women and to do all we can to protect our children and young adults from the risks to which they are exposed. F. R. G. Heaf, M.D., *J. Royal Inst. Pub. Health and Hygiene*, November, 1955.

Narcotic Addiction Among Physicians

By J. DeWitt Fox, M.D.
Detroit, Michigan

TODAY mothers and fathers are alert to the ever-increasing danger of narcotics addiction to their children. The American public is opening its eyes to the dope menace. We abhor the crime stories of teen-age youth having marihuana parties, then "hot-rodding" their way down our highways at eighty miles an hour. Parents shudder at the thought of some "pusher" seducing their sons and daughters into houses of ill-fame.

But while the public is looking at its own narcotics problem, the physician, the man nearest to the narcotic needle, should not overlook the menace in his own medical bag.

It is estimated that the narcotics addiction rate among the general public is 1:10,000 general population. The rate among physicians is 1:100.

This means that one student in each medical-school class of 100 is destined to end a narcotics addict. The entire output of one of our seventy-six medical schools is lost each year into the ranks of narcotics addicts.

Look at it still another way: Take any medical convention. Count down the seats. One of each 100 doctors present is destined to spend part, or all, of his remaining professional life as a narcotics slave.

Dr. Harris Isbell, Director of the U. S. Public Health Service Hospital in Lexington, Kentucky, the nation's leading treatment center for addiction, says, "Scarcely a week passes that a physician who is a Demerol® addict is not admitted to our institution." (Since Demerol made its appearance most new physician addicts take to it rather than morphine.)

If you personally feel secure against narcotic addiction, and think that it is only some worthless "no-account" with no brains and no future in medicine who takes to the needle, then listen to this case:

A California physician, Dr. Jackson, we will call him, was one of the most brilliant students in his class. He graduated *magna cum laude*, took a residency and research fellowship with one of the nation's leading scientists.*

Under the stress and strain of postgraduate study

*Dr. Andrew C. Ivy.

he became tense. Finding no time for exercise or breathing spells between tedious hours in the laboratory, he started taking barbiturates in order to get his rest at night. But these didn't do the job. One night he decided to try a little Demerol. It worked well. He swooned off into a wonderful sleep, relaxed completely, and had no worries about insomnia that night.

The doctor had found just what he needed. He had easy access to the drugs in the laboratory, and soon was taking more and more. It wasn't long until he was discovered and was immediately discharged from his fellowship.

He set up practice in a small town, where he failed miserably because he continued to take narcotics. He is in an institution today.

His loss is the tragic loss of any doctor who becomes a "dope"—he must renounce his long years of education for the world's most honored profession, a brilliant future, money, prestige. But worst of all, the world lost a doctor and gained a patient.

Barbiturates to Demerol

Here is the heartbreaking story of another gifted physician:

"After my internship I settled in an Eastern city. The war came along, and I was declared essential for civilian practice. From the first my business boomed. Going night and day, I would come home so tired and tense that sleep was impossible. I began taking Nembutal capsules, but they took too long to work. To speed things up I filled a syringe with IV Nembutal and slipped it into my vein. Before I hit the bed I was asleep. Impossible as this may sound, I thought it was smart. Just look at all the time I was saving getting to sleep. Imagine a doctor thinking like that!"

"But how did you start on Demerol?" I asked.

"One evening I came home tired out. My back was aching, my feet were sore and swollen. But I had promised my little fifteen-year-old daughter I'd take her roller-skating. I was sure I wouldn't be able to put on a pair of skates if I didn't do something for the pain. Surreptitiously I went into the bedroom, took a vial of Demerol from my bag, and gave myself a shot. I went skating and felt swell; in fact, I never had a better time.

"That started me off. I had found an escape from my pain and fatigue. But I little realized that I was falling through a trap door into hell."

If you think the cases of doctors taking narcotics are few and far between, look at one Eastern hos-

pital, where a regular epidemic occurred. The interns at this institution were taking to dope like ducks take to water. Within the space of a few years no less than five interns ended up dope addicts. Two died tragically, one addicted his wife, one has partially recovered.

Medical School Dean Addict

Even professors and deans of medical schools—the shining examples to students—are today succumbing to this insidious “disease.” Take the case of Dr. X.

Although he was dean of a university medical school,* Dr. X didn’t operate from an ivory tower. He took an active part in its experimental work. He had been studying pain-killing agents in an effort to find the human pain threshold. Sometimes he made tests on himself, using drugs in the experiments. The outcome was that not long ago Dr. X voluntarily entered the U.S. Public Health Service Hospital at Lexington, Kentucky.

One of his colleagues at the university said, “Nobody will ever know exactly what caused the addiction, but Dr. X’s close association with drugs may have had something to do with it.”

Why Doctors Start

Of course, all physician addicts are individuals, and their stories concerning the onset of addiction are different, but there are three common patterns into which physician addicts fall. According to Dr. Isbell these are: (1) Alcoholic physicians who relieve hangovers with opiates, (2) tired doctors who habitually blot out fatigue with a narcotic, and (3) doctors suffering pain from disease, who overdose themselves with opiates.

The alcoholic physician who finds it difficult to carry on his practice the day after a debauch may be given or he may take an opiate, which relieves all the symptoms of his hangover—the mental dullness, headache, nausea, or gastric pain. This he falls back on periodically. Finally he begins to take the opiate instead of the alcohol. Then the doctor is a dope!

The overly fatigued physician is all too common. He loses sleep several nights, receives another call, which he feels he cannot make without a “stimulant” to keep him going. He takes a dose of morphine, methadone, or Demerol, and goes ahead and makes his call. Finding such an escape a great relief he repeats it, until he too falls through the trap door into addiction.

*South Dakota Medical School.

The doctor who develops a painful disease, usually chronic in nature, is another candidate for addiction. He is given an opiate for relief of pain or after an operation. He returns to work too early, still has pain, continues the drug, until he is chained as a narcotic addict.

These common patterns seem to be excuses for the beginning of narcotic addiction, but Dr. Isbell points out that “we always find a serious emotional disorder in the background which leads to addiction.”

The emotional upset may be anything from a marital rift to income tax trouble. What every physician must remember is that he is human. Even though in his bag is an escape through a needle, he must never allow himself the pleasure of using it. For that narcotic in his bag is like a veritable serpent in Eden, which can lead only to his being thrown out of the Garden of his profession.

The Average Physician Addict

A detailed study of forty-seven physician addicts admitted to the U.S. Public Health Hospital, Fort Worth, Texas, gives the picture of the average physician addict:

He is married, has two children and practices in a small urban or rural community.

He begins using drugs at the age of thirty-nine and his addiction lasts thirteen years, during which time he makes three voluntary attempts at cure.

The longest period of abstinence found within the addiction span was thirty-two months.

In a six-month, follow-up study of doctors who underwent treatment, 50 per cent were still off drugs; 27 per cent had relapsed. Of the remainder, some had died, and no information was available on the others.

Physician Addiction Pattern

The course after the onset of addiction varies. Alcoholics who change to opiates usually give up the alcohol, and for a time their adjustment and social productivity appear to improve. But in the end those who use Demerol have even greater impairment of their ability to work than those who use alcohol.

Ordinarily the physician addict tries to cover his addiction by charging off to various patients the narcotics he is taking. His increase in the narcotics prescriptions leads to an investigation by the narcotic agent. The doctor then tries a “cure” in a private sanitarium. He will succeed in getting

off narcotics, but ordinarily he returns to his practice much too soon, and promptly relapses. His relapse is usually due to the emotional disorder that led to the addiction in the first place.

By now he is in trouble with the narcotic agents and his medical society. He loses his narcotic license and his license to practice medicine. He turns voluntarily to one of the Federal hospitals for narcotic addiction at Lexington, Kentucky, and Forth Worth, Texas.

A large number of physician addicts relapse time and again, just as other addicts do. The reason: They are human. They are susceptible to the same emotional stresses and strains, only more so, that their patients suffer. As every doctor knows, the worst patient he can ever have is another physician.

What most physicians need is a good night's sleep, more vacation time, release from tension, a quiet place for meditation. Yet few of us are willing to take time from a busy practice. When a person gets "wound up" tight nervously he may do a lot of reckless things. Even a doctor is not immune to the temptations that lure the layman in search of nervous release. In fact, a physician is in greater danger than any layman, because of the tense, tiring life he lives, and because of his easy access to the drugs.

Yet little or no instruction on narcotic dangers is given among physicians or in medical schools. It is high time that medical schools begin telling students the dangers and pitfalls they will face once they get a narcotic license, and have easy access to morphine, Demerol, codeine, and the other narcotic drugs.

The outstanding feature of these cases of physician addicts appeared to be lacking of warning young doctors before they went out to practice.

One addict told me, "During my student days not a single professor told us a word about narcotic addiction. We had plenty of lectures on how to prescribe narcotics, but not a word on the personal dangers—the hell on earth that comes after a doctor takes his first dose.

"We were warned repeatedly to stop narcotics two or three days post-operatively. However, not a word of warning was sounded about what would happen if the doctor took them for an aching back or painful joints when he had to keep going.

"It's time professors of medicine stopped taking for granted that young, inexperienced medical students know everything they should know. They

should warn them of the dangers. These young men ought to know about tragic cases such as mine. They are immature. Their knowledge is still spotty. They can't realize how much they still have to learn. It takes a lot of living to become aware of all the pitfalls of life."

Medical Students Warned

This matter of warning against the perils in easy access to drugs is a point every medical student and intern should have drummed into his very being. Even tavern owners tell their bartenders that their period of usefulness ceases the instant they start drinking liquor themselves.

Warnings evidently had not been sounded at a California hospital where an intern was discovered who knew how much "fun" a Demerol jag was. He had started a resident to taking it also, and before long they had drawn a nurse into their little party. Not until horrified hospital authorities found out what was going on were they out of danger.

Then not realizing the jeopardy to other interns and residents, the authorities hushed the matter up, and in spite of their sad experience they never gave a single medical student, nurse, or hospital doctor a word of admonition before sending him on the hospital floor.

Naturally every medical institution must guard its reputation. But if it values its reputation deeply enough, it will instruct its personnel adequately for their own safety and for the safety of the patients.

It is time every doctor—you and me—and every medical student—be told the "facts of life" when it comes to narcotic addiction.

Maryland Leads the Way

Fortunately, at the University of Maryland Medical School, Dr. John Krantz, professor of pharmacology, is spearheading a campaign of narcotics education among medical students and practicing physicians. Each year he has Mr. Harry V. Anslinger, commissioner of narcotics of the United States Treasury Department, come over to Baltimore from his Washington office and address the students on narcotics and their potential dangers to the physician as well as the layman.

"After hearing these down-to-earth lectures on a problem so close to home to the medical student and physician," says Dr. Krantz, "my boys have no excuses. They know the dangers. From

then on they are on their own. But I'm sure this is going to do much to shake medical students to their senses and make them avoid narcotics like the plague."

Some of these lectures are to be put into films to be distributed to medical schools around the United States. If you or your medical school desire further information on this vital subject, write to Dr. Krantz.

It behooves every medical school to follow the lead of the University of Maryland.

Physician Peddlers

Another solemn word of caution given by the U. S. Treasury narcotic T-men is:

"Doctor, don't be a narcotics peddler! You'll get caught every time."

One unfortunate doctor in a western state tragically learned this fact. He had been playing the races and lost heavily. In debt, he needed money quickly. A dope addict was tipped off to the doctor's plight. He stopped by the doctor's office, offered him \$25 for a prescription for Demerol. This was not enough. The addict upped it to \$100, and the doctor saw the answer to his indebtedness.

After he had written several \$100 prescriptions, a dope peddler stopped in at his office to warn him that if he didn't write a "big" prescription for him he'd be turned in for treating the addict without notifying the authorities. The doctor was in a corner. He wrote the prescription for a large number of tablets, and within hours was picked up by the T-men.

His narcotic license was immediately revoked, he was disgraced in his community by newspaper publicity and had to leave town. His only comment to the T-men: "Oh, what a dope I was!"

Prescription Precautions

Here is a list of "Don't" for physicians on the prescribing and use of narcotics as outlined by the Bureau of Narcotics, Treasury Department, Baltimore:

Don't leave prescription pads around. Addicts want them for effecting narcotic forgeries.

Don't write a narcotic prescription in lead pencil. Avoid writing any Rx in pencil; many are changed to call for morphine.

Don't write for narcotics this way: Morphine HT 1/2 # X or Morphine HT 1/4 # 10. Several

X's or zeros can be added to raise the amount. Use brackets, or spell out.

Don't carry a large stock of narcotics in your bag. Addicts are constantly on the lookout for these in doctors' offices and cars.

Don't leave your car unlocked if your bag contains narcotics. This is an invitation for the addict to steal narcotics.

Don't store your office supply where patients can get at it. Avoid storage near sink or urinal. The patient may ask to use these.

Don't fall for a good story from a stranger claiming ailment that usually requires morphine. The addict can produce bloody sputum, simulate bad coughs or other symptoms. Make your own diagnosis.

Don't give a narcotic prescription without seeing the patient. Addicts have posed as nurses to get doctors to prescribe narcotics.

Don't write for large quantities of narcotics unless unavoidable. Diversion to addicts is a profitable business: as much as \$3.00 for 1/4 gr. Morphine Sulphate.

Don't prescribe narcotics on the story that another doctor had been doing it. Consult that physician, or the hospital records, whenever possible.

Don't leave prescriptions signed in blank at the office for nurses to fill in. Signed blanks are bad practice and many have been stolen by addicts.

Don't treat an ambulatory case of addiction. Addicts must be under proper control. Addicts go to several doctors at a time. Notify your Narcotics Bureau.

Don't dispense any narcotics without keeping a record of it. Bedside and office administration are permitted without a record.

Don't buy your office narcotic needs in the name of a patient. The law requires you to use an official opium order form.

Don't resent a pharmacist's call for information about a prescription you have written. The pharmacist is held responsible for filling forgeries. Please co-operate.

Don't hesitate to call your Bureau to get, or give, information. It will be held strictly confidential.

Rules to Remember

Finally, to protect yourself against the insidious danger of narcotic addition, remember:

(Continued on Page 226)

The Evolution of Psychiatry as an Integral Part of Medical Practice

By Maurice Levine, M.D.
Cincinnati, Ohio

MY ORIGINAL title for this paper was "Revolution in Psychiatry." Such a title is short and to the point, but it sounded a bit too dramatic, so I substituted another. The first title still intrigues me. It phrases very succinctly one fact that I want to emphasize, that psychiatry today is far different from the psychiatry of twenty-five years ago, and that the change in many ways actually has been dramatic and revolutionary.

I'll start in a light vein. Twenty-five years ago all of the jokes about psychiatry expressed criticism and hostility; in them psychiatrists and their ideas usually were the object of ridicule. But now, jokes are told in which psychiatrists actually are fairly sensible people, and there's even one that indicates that a psychiatrist might have something to contribute to medical practice. It goes this way:

Once there was a man who was the most famous pickpocket in the country. He was so expert and skillful that the police finally decided to stop wasting their time trying to catch him in the act. One day he was picking pockets in Grand Rapids. As he was immersed in his own work, he felt a hand in his own pocket. He grabbed the hand, and pulled the person around. He was amazed to find that it was a woman, a beautiful woman. He recognized her as the most famous woman pickpocket in the world. They began to talk. They had much in common, they fell in love, they married, and she became pregnant. It is necessary for the story to say they have a midwife, not an obstetrician. They had daydreams of producing the most famous pickpocket of all time (with its double heredity and the training they'd give it). But tragedy struck. The child was born with a clubbed hand, and of course it could never pick a pocket. The distraught parents saw their hopes of producing the great genius shattered. They called in an internist, an orthopedist, a neurologist, but all said that the case was hopeless. Finally a psychiatrist was called. Since the

child was only fifteen days old, a good interview was impossible, so the psychiatrist decided to get the history from the parents and then to sleep on the problem and see if he would come up with a good idea. This he did, and came up with the idea that in this case the Lamarckian theory of evolution might hold true. The next day he saw the child, took the clubbed hand in his, and with his other hand he slowly and gently pressed the fingers up, one at a time, and there in the middle of the palm was—the midwife's gold wedding ring.

And then there's another indication of a remarkable and revolutionary change in psychiatric treatment, at least in Cincinnati. One secretary in our clinic is a marvelous typist, except for one word, "therapist." In typing this word, she inevitably puts a space after the third letter, so that it becomes "t-h-e r-a-p-i-s-t." Our case histories are full of interviews in which the patient said so and so to the rapist and the rapist said so and so to the patient, and the patient then said so and so to the rapist. It looks, gentlemen, as if our work with patients is so successful that they can sit down calmly and thoughtfully and have productive discussions with their rapists, a truly revolutionary change since our days in medical school.

But jokes are not the only indication of the changed status of psychiatry. Before our days in medical school, psychiatry was practiced chiefly in the state hospitals, in private sanatoria, and in the private office of neurologists. Then in our days in medical school, Adolf Meyer and others had taken the first steps in bringing psychiatry into the general practice of medicine. Their introduction of a psychiatric division on the campus of a general hospital brought psychiatry closer to general medical practice. And the architectural closeness led to some participation, but psychiatry was in most ways still a foreign body in the field of medicine, helpful chiefly in the handling of medical patients who become psychotic, or as a way of unloading chronic patients from the medical clinic.

Presented at the Annual Session of the Michigan State Medical Society, Grand Rapids, September 28, 1955.

Twenty-five years ago, psychiatrists had become interested in the problems of general medical practice, and frequently would exhort their medical confreres to pay attention to the personality problems of their patients, but then had too little to offer in the way of implementing their good advice. Psychiatrists at that time had achieved a fair knowledge of the kinds of psychoses and neuroses which appear in psychiatric practice—paresis, schizophrenia, depressions, delirious states, phobias and compulsions and the like, but when they had to deal with the medical conditions and problems that were the chief concern of the non-psychiatrist physician, they were able merely to talk in such vague and unsatisfactory terms as constitutional weakness, undue stress and strain, and autonomic imbalance. Obviously, this is not enough. If psychiatry was to become an integral part of medical practice, it had to turn its attention to the ways in which specific medical conditions or problems were in part caused by or influenced by specific psychologic problems, and on the basis of such research come up with specific and practical methods of treatment, either by psychiatrists or by physicians in general. And in the past twenty-five years, this has been done.

Now at this point in my preparation for this paper, I had to make a choice between two types of presentation. In the past twenty-five years, the integration of psychiatry into general medicine has been essentially along two lines. The one, which usually goes by the name of psychosomatic medicine, comprises the systematic studies of particular medical disorders, such as peptic ulcer, hypertension, migraine, ulcerative colitis, bronchial asthma, hyperthyroidism, neurodermatitis and some others—studies usually by teams of psychiatrists, internists, physiologists and others, and usually using the profoundly important concepts of psychoanalysis, studies which have led to a significant body of knowledge of value to all practitioners of medicine. Essentially, the findings can be summed up this way. In the etiology of such disorders, somatic and psychologic factors both are of great importance, and conscious and unconscious emotions and drives and anxieties and defenses play a significant role. Still further, if psychotherapy is based on the specific problems of importance in each disorder, e.g., suppressed rage and resentment in the hypertensive patient, such psychotherapy may be of some value in individual patients—and often this can be a psy-

chotherapy of the sort that is safe and effective in the hands of the nonpsychiatrist.

This material of the research on the so-called psychosomatic disorders is now readily available in books by Alexander, by Weiss and English, and in our recent multi-author book on Dynamic Psychiatry, edited by Alexander and Ross.

Consequently I feel free to emphasize the other, perhaps less dramatic, perhaps more significant, way in which psychiatry, in the past twenty-five years, has become a more integral part of medical practice. Essentially it is this: It has become clear that medical practice can be enriched by paying attention to the emotional problems that appear in many situations in medical practice, not merely in the psychosomatic disorders. For example, the very fact of being sick or disabled or in need of an operation produces emotional and personal reverberations that color the whole clinical picture and must be dealt with in some fashion. Such an approach may be called a more comprehensive medicine, or some title of that variety. Now that sounds very close to the sort of thing you may have heard some years ago. The difference is that it now has substance and clarity, and principles of understanding, and techniques of treatment. In these twenty-five years, basing its studies on such psychoanalytic concepts as the unconscious, and anxiety and defenses, psychiatry has developed a body of knowledge and techniques, of direct value in medical practice.

Let me elaborate on this conception of a more comprehensive approach, but instead of giving an abstract exposition, let me quote a few typical cases, a way of presentation which is more effective for an experiment group such as this. The principles involved are obvious in the case material.

Case Reports

Case 1.—The patient, a man, forty-five years old, was admitted to the medical service with a severe cardiac decompensation. He was gravely, critically ill. He was given the usual heroic medical treatment, which, however, was interrupted every hour or two by the patient's insistence on getting out of bed, throwing wide open the nearby window and doing deep knee-bends and gymnastics. Psychiatric consultation revealed that his whole life had centered around his need to show strength and masculinity; he would fight at the drop of a hat; his cardiac decompensation had directly followed a fight in which he had been knocked down for the first time in his life; he then had raced up four flights of stairs to show that he still was a man,

and that when the cardiac decompensation began, he developed enormous fears of weakness, of being a sissy. His deep knee-bends were his method of proving to himself that his cardiac disorder would not leave him weak and helpless. The medical residents thought that it might be necessary to force him to stay in bed, since there was serious danger that his gymnastics might lead to sudden death. The psychiatric consultant, despite some anxiety of his own, advised taking the calculated risk, and the patient continued his combined myocardial and athletic regime, gradually improved and was discharged from the hospital. He failed to return for outpatient care, and several weeks later he again was admitted to the hospital in cardiac decompensation, of approximately the same degree of severity. In the meantime the medical residents had rotated to another hospital service and a new group of medical residents was in charge. When the patient began hopping out of bed to do his deep knee-bends at the window, he was tied to his bed, struggled violently for a short period, then lay completely quiet and inert, and in two hours was dead. Now let me not be misunderstood, psychiatrists do not plan a campaign against having decompensated patients be treated with optimal physiologic rest; the advice in such a case as this is that attention to powerful emotional drives may necessitate a flexibility in routines to have such a patient actually achieve maximal physiologic relaxation.

Case 2.—The patient, a woman, twenty-eight years old, had had clinical thyrotoxicosis for a year. She had been persuaded, time after time, to enter the hospital to prepare for surgery. Each time, shortly after she was put to bed in the hospital, she would sign out on one pretext or another. On her fifth admission, she was sent to the psychosomatic unit. On evaluation, it was evident that she had many very severe psychologic problems, some of which seemed to be so pertinent and important that they might be contributing to the development of her hyperthyroidism. She seemed, however, not to be a good candidate for intensive psychotherapy because her past life had been so extremely traumatic and full of conflict and her present life so full of actual deprivation and pressure. Consequently, the decision was made that thyroidectomy was the treatment of choice and that an attempt would be made to avoid her signing out pattern, and to prepare her for operation. In spite of her four-plus sign out history, this was not too difficult. Her life history indicated that she had a constant personality trait of being exceedingly attentive and giving to others. Outside the hospital, she had given full reign to this proclivity, often to the point of self-deprivation. Her dominant pattern of life behavior was of caring for others. Even at the age of sixteen, she had had the reputation of being the neighborhood mother. It was evident that coming into the hospital each time, and being put to bed, had blocked this pervasive activity, and had made her so uncomfortable that each time she had signed out. Therefore, on this admission, she was not required to stay in bed full time. Her personal tendency to do things for others was utilized, and she was strongly encouraged to help the nurses and

other patients in their routine needs. She entered into very protective relationships with several patients and despite being mildly "busy" a good part of the time, her pulse rate and basal metabolic rate gradually fell. She adjusted placidly to hospitalization and subsequently underwent successful surgery.

Perhaps these cases will indicate the validity of my comment, that a study of the feelings, the emotions, the wishes, fears and defenses of patients has a practical value in everyday medical practice. In a sense, this may be called a more comprehensive medicine.

And let us amplify this by discussing the problems of patients who have had a coronary occlusion. The best way to understand the emotional state of another individual is to put aside one's highly prized, Michigan-trained intellect for a moment and to use the very primitive but revealing process that we call empathy. By this we mean the process of putting oneself in the other's shoes, in his situation—of identifying oneself with him for a moment or two, and then looking inward, noting how one feels. The question one puts is—"If I were in his shoes, if I had his sickness, how would I really feel—not how should I feel if I were superman, or completely mature, or pure as the driven snow, but how would I feel, actually, honestly, sincerely?" Now suppose that you empathize with a patient who is having or has just had a coronary occlusion, how would you feel? Put yourself in his shoes for a moment, and let yourself feel. The answer is obvious, and you know that no matter what he shows on the surface, he has tremendous anxiety, a fear of death, of final catastrophe, of being a cardiac cripple, of a loss of independence. Now such feelings are of course deeply unpleasant and disturbing, and our finding is that coronary patients react to such anxiety in many ways, perhaps in two more than others. Such reactions are called defenses against anxiety. The first defense, used by many coronary patients, is the defense of denial. Such a patient covers up and conceals his anxiety and lessens its discomfort by a flat and emphatic denial that there's anything wrong with him. Such a patient insists that all that he has is a mild indigestion, that he need not go to bed or to the hospital, that the doctor is only an alarmist. Such a defense does lessen or minimize the anxiety, but of course it is a dangerous defense. In a word, the patient is unco-operative, but not because he's an un-

co-operative, "ornery" human being but because he's forced to deny his overwhelming anxiety.

The second defense used frequently by the coronary patient is called regression. By regression we mean the widespread tendency of human beings, when they are threatened by serious anxiety, frustration or disappointment, to revert to earlier types of adjustment, in which they felt or seemed to feel more secure, more satisfied, more successful, more at peace. Many a coronary patient, under the impact of his pain and his overwhelming anxiety, regresses to a baby-like attitude and manner, becomes whining and complaining, appeals for sympathy, demands attention and time, and wants nurses and doctors to treat him as a small child and not as a man. This is not because he's an "ornery cuss," trying to make life miserable for those around him. He is behaving that way because he is responding to his inner fear by trying unconsciously to revive the old situation, when, as a child, he was hurt and in pain, he could run to the all-powerful mother who would protect him from evil.

Now these examples, the two cases plus the comments about the emotional responses of coronary patients, lead to my final set of comments about treatment.

We can say that present day psychiatry, then, has something to offer to medical practice, first, in the understanding of the specific psychosomatic disorders; second, in the development of a more comprehensive understanding of a wider variety of medical problems; and third, in suggestions as to specific methods of handling and treatment. In my book on *Psychotherapy In Medical Practice*, and more recently in my section on treatment in the Alexander and Ross *Dynamic Psychiatry*, I tried to summarize this third topic, suggestions for treatment. Today I want merely to point up one or two items which often are unclear or overlooked.

The first is that the suggestions for treatment arising out of psychologic considerations are not to be taken as being contradictory to the usual good medical practice. It is not an either-or matter, of psychotherapy or medical-surgical treatment. Rather the psychologic approach is to be regarded as an enrichment or broadening of the physician's work with patients. A patient with a bleeding peptic ulcer needs the usual active medical or surgical treatment, along with whatever handling of his dependency needs may

be suggested by an understanding of his personal conflicts.

My second comment about treatment is that the work of the past twenty-five years indicates that the most important tool in psychotherapy in general practice is the patient-physician relationship, rather than some specific technique of psychotherapy such as hypnosis or pentothal interviewing or interpretation of the unconscious. The psychologic well-being of the patients of the general physician is in part dependent on his ability to utilize constructively his personal relations with his individual patients. The feeling of security, of strength, of firm leadership, of dependability, which a patient achieves in a good relationship with a physician is of very great importance indeed. And the physician may, in addition, use certain specific aspects of the relationship as part of his therapeutic approach. For example, he may stress a mothering, protective approach in certain peptic ulcer patients who need a gratification of their drives to be dependent and cared for—with the usual caution, of course, not to overdo the protective giving attitude. Or the physician may develop and emphasize his function as an accepting, nonpunitive father-confessor in certain patients, e.g., in some patients with bronchial asthma who may get extraordinary relief from a confession of their peccadillos or temptations. Or the physician may emphasize the reliability of his role, and his refusal to have an attitude of rejection or criticism, in some hypertensive patients who are so prone to provoke rejection or to see it where it does not exist.

But this powerful tool of the patient-physician relationship is one which cannot be taken for granted. All physicians want to have good and productive relations with patients, but problems arise, some obvious, some more subtle. To illustrate this point, we can refer again to the patients with coronary occlusion: A patient who uses the defense of denial, is unco-operative, refuses to take his condition seriously, and regards the physician as an alarmist, can provoke the physician into attitudes that are nonproductive and perhaps even harmful. The physician may become angry and try to frighten the patient into being co-operative which of course may increase the patient's basic anxiety, which by the way can be shown experimentally to increase the workload of the heart very considerably. If, however, the physician knows that such an unco-operative

attitude is merely a defense against anxiety, he can deal with it rationally and constructively, by giving strong, firm explanations and direction, by putting across the fact of his own ability to deal with the situation, by being patient and tolerant and understanding; in a word, he can provide the patient with a better set of defenses against anxiety, without increasing the anxiety itself.

And with the other coronary patient who regresses to a whining baby state, again it is not easy for the physician to develop and maintain a good patient-physician relationship. His temptation is to be repelled by such behavior, to reject and perhaps to avoid the patient, to be critical and a bit contemptuous—or if the physician has an overly sympathetic type of personality, he may respond to the complaints and pleas for sympathy of the patient by too much coddling. But if the physician recognizes the fact that the patient is reacting to his anxiety with an unfavorable set of defenses, he can retain his good leadership, can handle the defenses in a tolerant fashion, can deal with the underlying anxiety, and still retain a respect for the basic worthwhileness of his patient, even when the patient's behavior is as unpleasant as it can be.

And now, in conclusion, let me deal directly with a question, a doubt that I know is in the minds of many of you. This is interesting stuff, you will say, and you will remember one or more specific cases in which personal problems were directly producing or influencing a medical problem. But, you might say, will attention to such problems make our medical students or our practicing physicians overemphasize the human problems of their practice and so neglect important physical diagnostic work, or delay some life-saving operations? Will they be so seduced by the drama of love and sex and hate, of fear and anxiety, of inner and outer conflict, that they will substitute this approach for the vitally important job of an organic approach to medicine? Now let me say emphatically that I agree with you that this is a real danger, and that medical students and doctors are only human, and may take an easy, lazy

way out of difficulties. Therefore, in our teaching, we lay tremendous emphasis on the need to have a balanced and complete approach. And it can be done. On our service, we repeatedly make a diagnosis of a brain tumor in a patient who supposedly is an hysteric. Recently we made a diagnosis of silicosis in a patient sent to us with a diagnosis of breathing difficulties based on anxiety. Our autopsy permission rate often is higher than that of the other departments in the hospital, indicating to the students that we are seriously interested in somatic as well as in psychologic findings. And when the curriculum committee multiplied by five our teaching of the third year students, I asked the most outspoken "doubting Thomas" in the other clinical departments to act as a one-man committee to observe the students when they worked with him in the fourth year, to see if they emphasized the patient as a person to the detriment of their study of the anatomic, physiologic or other disturbances of the parts of the patient or of the disease process. Two years later, he told me that students on ward rounds bored him to death with their comments about the life-problems of the patients, but had not ignored their responsible consideration of somatic problems.

And so I'm sure that it can be done, difficult as it is. Medicine is a hard taskmaster. The needs of our patients require that our approach be comprehensive, that we respect facts as they are, and that we know that in various cases bacteria, neoplasm, fear and hatred, are all etiologic agents that cannot be ignored.

It is the tradition of science to change theories to fit new facts. It is the tradition of medicine to have the needs of our patients be the overriding consideration, and if now, it becomes clear that the organic approach to medicine, enormously productive as it is, is incomplete, we can expect with confidence that medical practice will come to include those aspects of psychiatry which can be shown to be scientifically valid and of practical importance for the well-being of our patients.

In one series, 17 per cent of non-toxic nodular goiters were malignant; in another series 19 per cent were found to be malignant.

* * *

More perspiration and less publicity are needed in cancer research.

In one series of 184 cases of retinoblastoma there were only five survivors with eight children, seven of which had bilateral retinoblastoma.

* * *

Survivors of retinoblastoma should not have children.

New Drugs in Psychiatry

By Richard J. Lilly, M.D.
Birmingham, Michigan

I WOULD like to summarize my reasons for feeling that reserpine and chlorpromazine are not very good drugs in the treatment of mental illness. The claims made in behalf of these drugs are, I feel, much over done.

They are considered to be particularly effective in the treatment of psychotic patients. One of the most distressing features of the recent enthusiasm for the pharmacologic treatment of functional psychoses is the almost complete lack of rational explanation as to how these substances are supposed to act. The pharmacology of these preparations is largely unexplained. The literature discusses the end result of the treatment, the alleviation of symptoms, but does not explain why this favorable outcome occurs.

These drugs allay anxiety and induce tranquility. This may or may not occur. Even if it does occur, we must ask ourselves if this is desirable. Anxiety is a useful warning to the individual that all is not well. This warning enables the individual to attempt to modify the situation. This enables him to take steps which result in diminution of anxiety. The important thing to remember is that the anxiety serves to stimulate the individual to take steps which result in a more satisfactory status for that individual. The anxiety then serves both the patient and the therapist in pinpointing the source of the difficulty. This is an extremely valuable therapeutic tool. Diminution of anxiety by drugs may then be of questionable therapeutic value.

These drugs are recommended for use on patients showing disturbed schizophrenic behavior. If we can put any credence in the contribution to psychiatry by psychoanalysis, we must accept that this psychotic behavior has a meaning, and that it is a product of faulty personality development. This psychotic behavior has its roots in developments which occurred many years earlier and this psychotic behavior is a symbolic expression of early trauma. This behavior is a logical development of the early pathology. The symptoms are not the disease. Treatment of the symptoms cannot logically be expected to exert any influence on the disease process itself. Reports

have stated that these drugs exert a beneficial effect on hallucinations and delusions. These restitutional symptoms are not the primary disease process at all, but are secondary defects elaborated by a shattered ego. These restitutional symptoms are an attempt to regain intrapsychic harmony even at the expense of misinterpreting reality. These drugs may act through lowered or at least altered cerebral metabolism. The individual may be sedated. If this is true, we have a tranquil patient, but a patient who has only a part of his personality available. To sedate for long periods of time would mean that the individual would, of necessity, live on a lowered biologic plane. The literature frequently refers to these drugs as non-sedative. With this I must take issue. I have frequently observed the sedative effect with both the reserpine and chlorpromazine.

These drugs, according to the literature, can make the patient accessible to psychotherapy. Psychotherapy, to be meaningful, must be directed toward the solution of the patient's difficulties. Bypassing the psychotic material through the use of drugs means that an opportunity to understand the conflict, and perhaps give insight to the patient, has been missed.

Another goal to be achieved by the use of these drugs is decrease in demand on the time of attendants and professional people. I do not think that this is a worthwhile goal, because we are committed to a policy of treating the sick, not giving custodial care. Because a schizophrenic patient is disturbed is no reason to administer medication that merely tranquilizes him. We should try to determine why the individual is disturbed and what the psychotic behavior means to him. If we find the meaning of the outburst, we are on the way to removing the cause of the outburst. This treatment, if followed through, will, I think, result in fewer recurrences of disturbances and will enable the patient to exercise more freedom, and *then* fewer demands will be made on attendants and others.

Evaluation of results obtained has been almost without exception a very favorable one. The method used to evaluate results has been the

same in the several studies that I have read. This method consists of measuring the degree of behavioral adaptation to the hospital routine. It is considered favorable if the patient conforms better. This may or may not represent any actual improvement. It may, of course, represent an improvement, a remission, or even a cure. On the other hand, it may indicate apathy or despair. It may simply indicate the impaired function of depressed nervous tissue. The meaning of a change in behavior can only be evaluated by one specially trained to understand the action that unconscious material exerts on overt behavior. In other words, a modification of a set of symptoms can only be evaluated in light of the knowledge of the total personality. An attendant, regardless of his ability and devotion, lacks the knowledge of unconscious material and so his evaluation of the patient must only be superficial. The personality is complex and cannot be evaluated solely by overt behavior.

Improvement should not be measured by attendants alone because their point of view is such that they will unduly value conformity and passivity in a previously disturbed patient. On recently admitted disturbed patients, good results are the rule rather than the exception. I think we are not justified in concluding that the good results are due to these drugs. Other factors are involved. Favorable results may be due to:

1. Psychological factors. Together with the administration of the drug, the attendant also administers personal attention. This, in itself, is a value in permitting the patient to regain his self-esteem. Concrete evidence that others are interested in him enables the patient to value himself higher.

2. Many reports are not adequately controlled. The human characteristic of wishful thinking can play a large role, particularly in evaluating qualities which are not sharply defined.

3. Spontaneous remissions do occur. They are more the rule than the exception on disturbed wards of the receiving units. All of us who have worked with the psychotic patient for a few years know many examples of patients who, very disturbed on admission, now have ground permission or are home again. It is extremely difficult to say that reserpine or chlorpromazine are not responsible in those instances where they were ad-

ministered, and yet similar results are seen in those who did not receive this drug.

Another type of reported improvement is that group of patients whose restitutional symptoms are no longer in evidence. These patients appear improved, but continue to be incapacitated for life outside of the institution. They have moved from a disturbed hall to a comfortable hall. Their psychosis has, in effect, gone underground. This type of patient has been tranquilized, because he no longer feels anxiety. This tranquility itself must be evaluated. It may be the end result of apathy and despair and may signify only resignation. An individual living in a mental institution is subject to certain necessary restrictions and regulations. Anxiety under these circumstances is an expected phenomenon. Lack of anxiety is a poor prognostic sign, even when drug induced.

I think that to evaluate these agents properly, intensive rather than extensive studies would be of value. An attempt should be made to study modification of characteristic mental mechanisms or patterns of reaction during the administration of the drug. This could be done by free association techniques, by studies of dream material, or utilization of projective techniques. Unless there is actual modification of unconscious material, tranquility should not be considered curative.

I think that treatment directed towards the brain substance itself presupposes that pathology exists in those tissues. This is not so. In functional psychoses, particularly in schizophrenia, no tissue pathology has even been demonstrated that adequately explains the development of the psychoses. Drugs which act on the central nervous system should not be expected to act on the disease process. In functional psychoses no pathology has been demonstrated in the brain substance. Drugs acting on the brain substance producing diminished aggressiveness and increased tranquility do not act on the etiologic agents of the disease. Their effect can only be achieved by limiting the capacity of the human organism to react to stressful situations. Diminished capacity to react can only indicate impaired brain tissue function. Impaired brain tissue function is too big a price to pay for tranquil patients.

865 Norwich

The superintendent of Pontiac State Hospital, Ivan A. LaCore, M.D., has authorized publication of this paper, although he does not share the author's opinion as expressed.

Detroit Surgical Association

Meeting of September 24, 1956

THE USE OF FROZEN SECTION IN CANCER DIAGNOSIS

E. R. JENNINGS, M.D., and J. W. LANDERS, M.D.
Department of Pathology, Woman's Hospital, Detroit

The advantages and disadvantages of frozen section at operation in the diagnosis of cancer are discussed. Certain principles guiding the correct use of the method are set forth, and the responsibilities of the surgeon and pathologist defined.

The authors' recent experience with the frozen section method is analyzed. Of a total of 412 examinations, a definite diagnosis of benign or malignant was made in 94.9 per cent. An erroneously negative diagnosis was given in six instances; an erroneously positive diagnosis in none.

It is concluded that: (1) frozen section is a useful diagnostic tool in the surgical treatment of cancer; (2) the method must be used frequently to be reliable; (3) false positive diagnoses of cancer must not be made; and (4) the limitations of the method must be understood by the pathologist and surgeon alike.

THE TREATMENT OF INJURIES OF THE HAND CAUSED BY HOMEMADE BOMBS

F. AUGUSTUS ARCARI, M.D. and JOSEPH L. POSCH, M.D.
Department of Surgery, Grace Hospital, Detroit

Fifty per cent of explosive injuries of the hands in children are caused by homemade bombs, and forty per cent of these cases have associated injuries of the face.

Two cases were presented in detail characterizing the destructive extent of these injuries involving all tissues and giving rise to massive loss of digit.

Consideration of these two cases indicated the need for planning the therapeutic program from the time of first treatment, the necessity for being extra conservative in primary debridement, and the hazards inherent in primary flexor tendon repair.

Emphasis was laid on the importance of planning the first procedure, keeping in mind the probable necessity for secondary procedures, and the aim—maximum function.

Meeting of October 22, 1956

CRYPTORCHIDISM IN INFANTS AND CHILDREN

By CLIFFORD D. BENSON, M.D., and
CHARLES R. REINERS, M.D.

Correction of cryptorchidism is indicated for the following reasons:

1. The testes is more susceptible to trauma when located in the inguinal canal.

2. Torsion of the undescended testis is not a rare complication.

3. Fertility. Testes which remain in the canal of abdomen have no spermatogenic function. If these testes are positioned prior puberty they can be shown to be fertile. Recent work shows that fibrotic changes occur in the undescended testis beginning at ages four to six. This has stimulated many surgeons to advocate operative correction before school age.

At operation, mobilization of the cord structures by sharp dissection is paramount so that the testis can be positioned without tension or compromise of blood supply. A modification of the usual pro-

cedure is advocated in which the testis is placed in a pocket constructed between the dartos and the scrotal skin. Retraction of the testis is prevented by a silk suture placed through the lower pole of the testis and fixed to the thigh with a rubber band. This is felt to be superior to the Torek procedure because it avoids tension which can damage blood supply.

Ninety-four patients are reported. In thirty-five the Torek procedure was used and in forty-nine the modified procedure, in the last five years.

EVALUATION OF PERITONEAL ASPIRATION AS A DIAGNOSTIC AID

By THOMAS D. GREKIN, M.D.
Department of Surgery, Wayne County General Hospital, Eloise, Michigan.

Aspiration of the peritoneal cavity has been used regularly as a diagnostic procedure in all acute conditions of the abdomen in which the diagnosis was not obvious. The procedure has special value when applied to those cases of trauma

where intraperitoneal hemorrhage is suspected. Experimental data are presented to show that peritoneal aspiration is a safe procedure. From a review of our experience with a large number and large variety of cases, we conclude that this procedure is frequently more helpful than any other diagnostic aid. We suggest certain indications for, and a method of carrying out, peritoneal aspiration.

VASCULAR DYNAMICS IN HEMORRHAGIC SHOCK AND ITS THERAPY

By DON E. INGHAM, M.D., HARRY M. NELSON, M.D., and HERBERT J. ROBB M.D.

Department of Surgery, Wayne State University, Detroit Receiving Hospital and Dearborn Veterans Hospital.

Hemorrhagic shock is universally treated by blood replacement; however, on occasion, when blood is not available it has been treated with Vasoconstrictive drugs. By use of the stereo dissecting microscope it has been possible to study the difference in response to these two methods of treatment. For facility and because of similarity to the human vascular pattern, the transilluminated bowel wall of the rabbit is used for the study. Carotid artery and superior venacaval catheters with attached manometers are used to record changes in blood pressure. Changes are brought about by removal and replacement of measured amounts of blood and administration of various vasoconstrictive drugs. By use of cine-

photomicrography the changes which occur have been recorded on the 16 millimeter motion picture film.

In the film the normal capillary and precapillary vessel pattern is demonstrated. With the removal of 30 per cent of the circulating blood there is a narrowing of the precapillary vessels, decrease in their pulsation and a marked decrease of their flow and the flow in the capillaries. Blood pressures drop from a normal of 100 mm. Hg. to 75 mm. Hg. A return of the heparinized blood brings about a restoration of blood pressure to 100 mm. Hg. and a return to normal size and flow in the vessels.

A second rabbit is placed in identical shock with a blood pressure of 75 mm. of mercury. This animal in contrast however, is treated with sufficient vasoconstrictive drug in a diluted solution to return the blood pressure to 100 mm. Hg. A segmental arterial spasm and tissue blanching unlike that found with blood replacement develops. This progresses to a thread-like uniform spasm in the small arteries. When the drug is stopped, the blood pressure not only drops to the pretreatment level of shock but continues to drop to around 20 mm. Hg. At this point, restoration of blood volume improves the pressure. This improvement is only partial and temporary, however, for pressures again drop to severe shock levels and usually death. Once vasoconstrictive drugs have been used there is an apparent relative refractivity to blood replacement therapy and normal body compensatory mechanisms.

NARCOTIC ADDICTION AMONG PHYSICIANS

(Continued from Page 217)

1. You are human, subject to the temptations of laymen.

2. Never let easy access to narcotics be an excuse for your first "shot."

3. Don't get overly tired and fatigued. When you are worn out, take a vacation. It's a lot safer, and a lot more fun.

4. Don't drink. Alcoholism can lead to drug addiction.

5. If you have surgery or become ill don't ever take narcotics on your own. Keep in mind what Benjamin Franklin said: "The man who treats himself has a fool for a doctor."

6. As a monitor against easy escape from an

emotional problem, always think of your family, your future, and your prestige. Best of all, breathe a prayer for God to keep your hand off any narcotic during time of stress.

7. Take time to relax each day and meditate on the many blessings God has given you. This will "up" your spirits. Only depressed doctors take dope. Keep a happy mental outlook, and you do much to prevent the world's most insidious and most hopeless habit.

If observed, these hints will do much to reduce the 100 new doctor-addicts lost from our profession each year.

16834 Rosemont
Detroit 19, Michigan

Operation Armor

By action of The Council of the Michigan State Medical Society, "Operation Armor" was created on December 12, 1956.

Operation Armor is a promotion applied to an old story. That old but important story is the need for all children and adults to be properly vaccinated against dread diseases such as poliomyelitis, smallpox and diphtheria.

On December 21, 1956, telegrams, special delivery letters and telephone calls went out to all Michigan newspapers, radio, and television stations, and to county medical societies pointing up Operation Armor.

The MSMS message was that millions of polio shots are now available, that they might soon go to waste. Many children have had one or two of the series of three shots. We urged doctors of medicine to contact their patients, complete the series for children already started, and encourage all persons under age forty to be vaccinated against poliomyelitis.

It was pointed out that the diphtheria attack that recently struck Detroit in near epidemic proportions occurred in those areas where a large proportion of people were not inoculated and that all immunizing programs should be reviewed and strengthened.

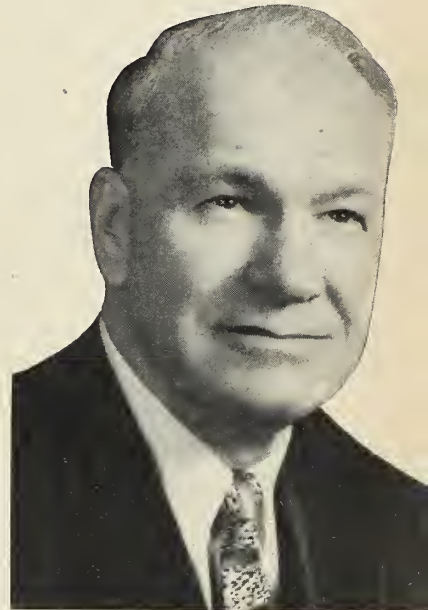
Our Society believes that here and now the medical profession has a golden opportunity to render significant public service by spearheading the vaccination program. We must not allow inertia and apathy on the part of ourselves or the public to cause large segments of our people to remain unprotected.

Some states have resorted to compulsory immunization laws. Michigan has stayed ahead of compulsion by the support of mass communication media and the efforts of each practicing doctor of medicine.

Operation Armor is not a short term campaign—it must be a continuing effort. The medical profession should take the leadership. We must go "all out" to see that a minimum of 75 per cent of Michigan residents are properly vaccinated.

Talk to your patients, talk to your friends, talk Operation Armor now and every day of the year.

President's



Message

Rich Walls M.D.

President, Michigan State Medical Society

Editorial

PRIVATE MEDICAL PRACTICE IS AT STAKE

Our medical profession has passed through many critical trials. During the hard times of the "thirties" and the economic stress, when many of our patients had no money and no work and when post-payment had failed, farsighted members conceived the idea of relief brought to our public by substituting an insurance idea for the previously discouraging method of payment. National officers of our medical associations frowned and insurance companies were aghast—"medical services were uninsurable." Labor and politicians sensed the condition and proposed, as so many European countries had done, that the State should assume the burden and establish a National Compulsory Health Program "at no cost to the consumer."

Some of our Michigan doctors and many others throughout the land found an answer—prepaid health services. An unchartered course, trial, error, discouragement, resentment from our own members, disavowal from national officers but encouragement from Senators Vandenberg and Taft, and a dogged persistence in solving a momentous problem, resulted finally in establishing Michigan Medical Service and Michigan Hospital Service. Later, similar groups were formed in nearly every state. The need was universal; the answer, as history has always shown, came from least expected points—the visionaries, the dedicated, the never-say-die members of the profession in our state and elsewhere. Prepayment stopped the march to statism in medicine.

The course was not easy. It involved

ninety per cent of our doctor members agreeing to care for in-hospital patients, and promising to accept the remuneration our plan^e could give. For a period of ten months, Michigan Medical Service did prorate accounts, and delayed payments as long as possible. Errors of estimating utilization had given Michigan Medical Service too small premiums. When that was corrected—one of the trial and error methods—a new era in medical practice developed and the socialized threat was met and defeated. (Incidentally, the prorated bills were all paid in full in due time.)

Problems of financing, increased costs of services—largely hospital services—and the growing unrest of our own participating doctors who fail to recognize Michigan Medical Service as their own heart's blood, considering it instead a "rich insurance company," during the past year have brought on a Governor's Commission investigation to find a way to "furnish more and better health service" for less. The unions began to demand more complete coverage. Much of the testimony before the Governor's Commission emphasized the wish for such items as office or outpatient surgery, diagnosis, radiology, x-ray (therapeutic as well as diagnostic), physical medicine and consultation. All these are extensions of Michigan Medical Service's program which can be given for an increased premium, and which, after an exhaustive study, the Board is ready to offer. Methods of administering must be found to avoid the malutilization found to be present by MSMS Medical Advisory Committee to MHS.

The Commission hearings and the pub-

licity in the metropolitan press over much of last year have given the medical profession "black eyes," encouraged disaffection, and recently stimulated the proposed establishment of the Community Health Association by a pressure group.

Community Health Association is said to be not fully developed, but has announced many plans and programs. CHA offers home and office calls, and practically complete "comprehensive" care. Prices are not mentioned, but the definitely expressed plan is to employ doctors part time or full time and have them work in out-patient departments or under group practice conditions. If a few "super specialists" are needed, they will be on a fee or retainer basis. The promise is that the subscribers will positively never have to pay any "extra" fees over and above the subscription rate.

We must face this fact. CHA will put the portion of the medical profession needed to serve its subscribers on a definite salary arrangement, paid by a pressure group. Where will the doctors come from? A liberal salary to a just-finished intern with no financial worries was all Permenente needed.

This latest threat to the private practice of medicine is so real that the Council of the Michigan State Medical Society at its annual meeting on January 24, 25, 1957, after two days' discussion, directed the Speaker of the House of Delegates to call a special meeting as soon as four active committees can formulate a program. Only once before has a special meeting of the MSMS House been called—when the Society considered our problems grave. So does it now.

When called, every delegate and every alternate should attend. Concerted and vigorous action, with complete and full

support from every member may be the price of averting the present danger.

Private medical practice on an independent basis is at stake.

A DAY DEVOTED TO THE STUDY OF CANCER

Why should every physician, irrespective of the nature of his practice, take at least one day out of each year and devote it exclusively to the study of cancer? Many answers can be brought forth to respond to this question. Probably no one could designate which response was the best and then convince the majority that his selection was the most valid. In the writer's humble opinion, each physician needs to be equipped with sufficient knowledge of the nature of cancer to be able to detect or suspect the presence of cancer when he has opportunity to interview or examine any region of the potential host. *Any patient, irrespective of age, is a potential cancer host.*

The American Cancer Society, other organizations, and a number of individuals, have made numerous studies relative to the benefits of the so-called cancer detection clinics. The vast majority agree that there is a place only for a limited number of critically selected clinics for research and advanced teaching. Such clinics, if established in every sizable community, would impose a prohibitive extravagance on the American public, strain the available medical personnel too severely, and benefit very few people.

Cancer detection programs must be carried out in every physician's office and at every bedside if they are to give rise to the benefit that they should. Lurking cancer, when best suited for any form of therapy, rarely gives rise to symptoms; however, it behooves the physicians to be mindful of the fact that a goodly number of their clientele have been educated to beware of asymptomatic lumps and bumps. The validity of cancer detection efforts needs no further emphasis. It is agreed that every physician must be a cancer detector. It now remains for each physician to demonstrate how good a detector he is. Ability to detect cancer is directly proportional to one's ability to think intelligently about cancer.

The Genesee County Cancer Day Programs are dedicated to the premise of enabling every physician to improve his knowledge and thinking in respect to perplexing problems of cancer, irrespec-

tive of the nature of his practice. In addition, the programs are so designed that those actively engaged in cancer management can always pick out enough pearls from the program to reward them adequately for taking off a day for an annual trip to Flint.

HARDIE B. ELLIOTT, M.D.

THE WORD—PRINTED AND SPOKEN

Our offices, homes and libraries are bursting at the seams with a suffusion of the printed word. Whether you are awake or asleep, at the operating table or in the laboratory, on the golf course or in front of your TV screen, somewhere a compulsive scientist is writing an article that you must try to read. We even have an appreciable bibliography pertaining to methods of covering this plethora of material.

You may have your secretary choose and file, but you still must read the material or soon she will be the better informed. You can subscribe to many abstracts, quarterly reviews, and digest, but that just adds reading material to unread material.

On the chance that you are the distressingly conscientious type who reads non-illustrated articles and editorials in your State Journal, I am writing this to point out the advantage the spoken word may have for you.

A man facing you is forced to express himself with meaning and clarity. His paper is not based on a "publish or perish" dictum. He has left the security of his desk and the acquiescence of his dictaphone to present his material to you in person. He risks question and difference of opinion. Therefore, he must be prepared for the practical give and take of verbal communication that can be so valuable for all concerned.

These are the conditions under which outstanding teachers will present their material at the Annual Cancer Day meeting in Flint, Michigan, April 17, 1957. Each speaker will have the time to develop his topic and present his total experience. He will be available to discuss specific questions that will arise during the day.

Have you been told that cobalt therapy is just another form of x-ray—and wondered? Or have you been told it has unique properties—and still wondered? What did you hear about chemotherapy as an adjunct to surgery in large bowel cancer? What are the valid considerations in the

technique of resecting bowel lesions? Should doctors give up and let the statisticians treat breast cancer? Is chemotherapy advancing, or are we just getting acquainted with the rest of the nitrogen mustard family? And what about cancer of the prostate? Did John Hunter complete the job with that first castration?

The paper writers are currently asking a great many questions without following through with very many answers. Why don't you give the spoken word a chance and listen to six of the men who are studying the material and accumulating the experience on the frontiers of cancer therapy? Join the group at the annual Cancer Day meeting April 17 in Flint. (See program on Page 140.)

MAX DODDS, M.D.

GENESEE COUNTY MEDICAL SOCIETY

This issue of *THE JOURNAL* is devoted to the Cancer Day Program of the Genesee County Medical Society which this year is presenting its Twelfth Annual Cancer Day. We are indebted to Hardie B. Elliott, M.D., of Flint for his very able assistance. He has been in charge of these programs for many years, and has prepared for *THE JOURNAL* an historical sketch and an editorial, a program, and several articles for the scientific pages. We also wish to give our sincere thanks and approbation to Mr. Donald E. Johnson, publisher of the *Flint News Advertiser*, who has been the financial sponsor of these Clinics since their inception.

MEDICINE'S CONTRIBUTION TO WORLD PEACE

Medicine is universally recognized as one of the great world-wide arts and sciences that bind humanity together with a language and a purpose transcending all differences of race, creed or color.

To make the language of medicine more articulate in the cause of international peace and human progress, the doctors of the free world are united in The World Medical Association, whose membership now embraces fifty-three national medical associations.

But it is never enough to establish great institutions. Only when *individuals* are given an opportunity to play an active part does any human organization "come alive" and begin to realize its basic purposes.

Every American doctor knows first hand the vital role he may play in guiding and protecting his profession by becoming an active member of his county, state and national medical societies.

Today, every American doctor has the opportunity—and the imperative challenge—to help make our profession a stronger influence for world peace. This he may do by joining our own United States Committee of The World Medical Association.

Similar “supporting committees” have been organized in a number of other leading nations whose national medical societies, like the AMA, are members of WMA.

In a timely action, WMA, at its Tenth General Assembly in Havana in October, adopted a six-point program to implement one of its constitutional purposes: to promote world peace. This program includes the development of mutual exchange visits of foreign doctors; exchanges of distinguished medical teachers; establishment by each WMA member national association of an “international visitor’s bureau”; stimulation of visits by representatives of member associations to the annual meetings of other member associations; holiday exchange programs between doctors and their families; and exchanges of text books and medical and scientific publications.

To implement this program takes money—and interested members. *You* may play your part by joining the U. S. Committee of WMA. Active membership dues for 1957 are \$10.00. To join the U. S. Committee—and to learn how you can contribute to this great cause—communicate with William A. Hyland, M.D., Grand Rapids.

MEDICARE

The Medicare program went into effect in Michigan without a hitch and is proving a blessing in many ways. Many of the dependents have not yet been issued cards specifying their eligibility for service, but the doctors are co-operating, giving the services and making the reports. Some of the patients do not even know they are eligible.

The Editor’s first case was a young mother, with a cross-eyed baby of twenty months and a husband overseas, who was concerned about how she would pay for the baby’s care. She was elated at the Medicare news.

The program is settled in every state and territory but two. The state medical society of one

state refused to agree as a society to accept the fees as full coverage. One state could not agree on fees. In both cases the Military Forces’ Medicare’s Administrative Officer, Major General Paul I. Robinson assigned a commercial company, Mutual of Omaha, as the fiscal agent.

BLUE SHIELD ACTS TO MEET NEW CHALLENGES

Ten years ago forty-five struggling local Blue Shield Plans had a combined enrollment of less than two million people. Today, seventy-three Blue Shield Plans cover some thirty-eight million; and if their present rate of growth is maintained, these Plans will pass the forty-million mark in enrollment during 1957.

Several factors have conspired in recent years to alter and complicate the basic problems of Blue Shield enrollment. For one thing, most of the windfall apples have fallen off the tree, and enrollment men are having to climb ever higher in the tree to fill their baskets. Most local “blue chip” industrial groups have long since been enrolled by Blue Shield or some other agency, and the remaining local prospects are predominantly small groups, the self employed and rural dwellers.

Another vital new factor has been introduced by the tremendous growth of new industrial giants resulting from corporate mergers, and the concomitant tendency of labor unions to negotiate welfare benefits on a national scale. These big corporations and unions are demanding nationwide hospital and medical care programs, offering at least the same scope of benefits for their workers in all parts of the country.

Blue Shield is an association of strictly autonomous local Plans, having similar purposes, but offering a considerable variety of specific benefits. The constitution of Blue Shield Medical Care Plans recognizes that “state and local medical care plans should be autonomous in their operations so that the needs, facilities, resources and practices of their respective areas can be given due consideration, but that the health and welfare of the public is advanced by the co-ordination . . . of methods, coverages, operations and actuarial data.”

The Plans have sought, by voluntary agreement, to co-ordinate their efforts and to develop a basic program which each local Plan may offer the members of inter-Plan groups within their local Plan areas.

Without sacrificing an iota of local independence, more than three-fourths of the Plans have recently reached agreement on a standard scope of Blue Shield benefits, all or any of which each Plan will make available to any group of subscribers desiring this pattern of benefits. Nearly all the other Plans have promised to "go along" in the near future.

While this degree of co-ordination of benefits (in terms of covered services) has been found necessary to meet Blue Shield's enrollment challenge, each Plan will still make payments to physicians according to its local negotiated schedules, and will calculate its own subscription rates.

This significant achievement of Blue Shield shows its ability to meet new conditions and proves the capacity of medicine's voluntary prepayment movement to solve whatever problems it may encounter.

MICHIGAN MEDICAL SERVICE

It is time our members understood explicitly some of the major problems our Blue Shield program must face, the most important being finances. The records for the year 1956 are not all complete, but for ten months up to October 31, 1956, expenditure was considerably more than income. We will report the results for our Medical-Surgical and Surgical Plans. The Veterans work always breaks even. It amounted to \$750,470.30 during the ten months, which can be added to our other figures for gross amounts.

Subscription Fees	\$35,832,871.16
Services Rendered (paid)	34,721,466.40
Administration Expense	2,770,423.39
Operating Loss	(1,659,018.63)
Miscellaneous Income	2,563.35
Investment Income	294,562.02
Net Loss	(1,361,892.36)

Reduced to percentages, Michigan Medical Service spent on services to policy holders:

1956	96.80%
1955	91.34%
1954	90.66%
1953	89.82%
1952	86.44%

In the beginning, for each patient served, Michigan Medical Service made out one set of records and one check for payment. Now each recorded case receives 2.7 services. At first only

one doctor was involved, but now 2.7. This is one reason for increased costs. The average number of services per member has changed. In 1950, with 2,000,000 members, there were 24,000 services per month. The usage has rapidly increased in 1956 with 3,400,000 members receiving 98,000 services per month—an increase of two and one-half times.

The premium rates for the \$2,500 contract were increased in 1941, 1942 and on March 1, 1950. On that date, the \$5,000 contract was sold and its rates have not been changed. The Board of Directors has, however, at various times on the recommendation of the Medical Advisory Committee, readjusted or increased allowances for many and various items when inadequacies were shown. Formerly some x-ray, pathology, electrocardiograms, et cetera, were paid as hospital services. Michigan Medical Service assumed these costs recognizing medical services. The result of such changes, and the inclusion of various liberalizations has been a gradual advancement of proportionate costs, so that Michigan Medical Service is now paying 24 per cent more for the average service.

There are still many items which individuals or groups claim are not in line and should be readjusted upward. Liberalization has reached the limit, and this year Michigan Medical Service is operating at a deficit. There is a reserve which can carry the load for a while, but the trend is established. On December 31, 1955, the reserve was \$8,057,741.87. On October 31, 1956, it was \$6,695,849.51. The two months of November and December may show a better figure—as a rule December utilization drops.

Michigan Medical Service is not just another insurance company with vast resources as too many of our members seem to believe. It is an integral part of our medical society. It started with nothing but \$17,000 borrowed from the Michigan State Medical Society, and proved to the world that medical care is an insurable quantity. Our leaders had begged the insurance companies to establish some form of prepayment (insurance) which could be sold and could care for the hospital and/or medical needs of our patients. We were told medical care was uninsurable. The profession at great sacrifice has demonstrated otherwise. Now, insurance companies are giving great competition and some of them resent our continuing in the prepayment field.

Reassurance.—Socialized medicine, a term we seldom hear now, was an ominous spectre some sixteen years ago, promising medical services to vast members of people who could not provide for themselves except at great and many times catastrophic sacrifice. We demonstrated the economic ability and willingness of the medical profession in times of stress. Our plan and its accomplishments are sacred to those who bore the burden of creation! It *must not* prove inadequate. Our patients have grown to depend on it for their needs.

Extended Service.—Demands are being made for extended services in many fields. Our doctors are advising many changes, mostly in the matter of readjustment of fees paid. Some are advocating removing the service connotation and changing into an indemnity plan. Other doctors advocate a deductible feature to be included in every contract.

Our patients and our subscribers are asking for many extensions of service which the Board is studying and hopes to be able to offer. We have mentioned some of these before: surgical services in office or in out-patient departments, anesthesia in office or out-patient departments, diagnostic radiology in office or out-patient department, therapeutic radiology, physical therapy, E.K.G., B.M.R., E.E.G., E.G. pathological tissue examinations, all in out-patient departments or doctor's offices, and the hospital services necessary to accomplish these.

These services could be sold as a rider or another contract for a price to be determined. When such services are made available to subscribers, the liberalizations voted during the past several years, which have tended to increase the deficit, should be eliminated. By so doing a rate increase might possibly be avoided.

Most of our members will remember the furor caused by the over utilization and unnecessary service charges made a few years ago. Those grew out of many things and many misuses, but some were due to abuse of privileges by some of our hospitals, doctors, and patients. Some means of control may be necessary, but doctors surely would rather be their own policemen. Michigan Medical Service has had enough misuse and abuse with the limited services offered these many years, but, with an extension which could possibly double the amount of benefits, it is hoped

our members will always bear in mind that our life-saving Michigan Medical Service is our own pocketbook.

Proportionate Value.—A very considerable number of our members are complaining of the inequality of some fees for services as compared to others, especially surgical charges. That is a problem the profession has had since surgery began. The profession has not made adjustments where some thought returns were out of line. Medical Service should never be asked to make that adjustment.

Twenty years ago in Michigan we attempted to establish a fair unit rating of all medical services. We found no key. A little later California found the same difficulties. Two years ago another report in Los Angeles completed a two-year study and published an extended schedule—but divided the profession into four groups. Their values were much as had been determined twenty years before, but they admitted they needed four schedules instead of one.

WHAT'S NEW IN DRUGS?

(Continued from Page 212)

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Michigan Clinical Institute

Medical Color Television—A Changing Picture

Compatible color television will make its debut performance before the Michigan Clinical Institute at its annual meeting convening in Detroit, March 13-15. The newly acquired equipment represents the first major change in the basic color TV facilities provided the Institute meetings by Smith, Kline & French Laboratories and features a projection system that more than doubles the brightness and clarity of the picture seen in the viewing auditorium.

The three-day, four and one-half hour program consisting of six clinics and two operations will originate from Grace Hospital. From here it will be beamed via microwaves to the Ballroom of the Sheraton-Cadillac Hotel where a projection-type receiver equipped with a 4½x6-foot screen will be installed.

Increased picture quality will be complemented by a new programming technique for surgical procedures. The two operations to be televised will employ a three-way conversational hook-up between the operating surgeon, a panel of distinguished specialists and a moderator at the auditorium.

Veteran M.C.I. viewers will notice no radical change in the amount of equipment installed in the television auditorium. The big difference appears on the screen itself. The picture, while the same size as in years past, is thrown on the screen with double the former light intensity by the new compatible projectors. In others words, to a physician seated in the usual viewing area, the picture is twice as clear and sharp. Then, too, the increased brightness extends the viewing area, permitting many more persons to view each procedure. Since the operative fields are pictured in close-ups varying from three to seven inches in width, the images shown on the giant screen represent a range of magnification of from 100 to 600 times actual sizes.

There is a radical change, however, in the appearance of the SKF Color Unit's facilities at the hospital end of the colorcasts. In the operating room, the first color camera of them all, affectionately called "Clarabelle" by the Color Unit, has given way to a camera with a special lens arrangement that will focus on a mirror directly above the operative site. While Clarabelle never obstructed the operating surgeon in any way, the new positioning removes the camera still farther from the operating table and potential interference. Another advantage brought by the new camera is a revolving lens turret. Now three different close-up views of the same operative field



are available to the audience in place of the former fixed view.

In the studio, panelists and clinic participants are no longer to be confronted by two cameras of standard black-and-white size, adapted for color. In their stead, two cameras of somewhat awesome dimensions are trained on the doctors. Almost five feet long from Zoomar lens to control rods, each camera is an example of the engineering know-how that assures the Color TV Unit—and postgraduate teaching—of the finest in technical equipment for years to come.

Finally, the control room or "brain center" of the colorcasts will not be found on the same floor as the studio or even within the hospital. Cables leading from the cameras within the hospital run through windows and down the outside wall of the hospital to a huge truck parked close to the building. The truck is, in effect, a control-room-on-wheels, containing all control equipment necessary for a three-camera program. Via headsets, two men seated at the truck control panels take instructions from the director's booth located inside the studio and maintain the technical quality of the picture, while far from the actual television scene.

Altogether, the versatility of the new equipment, the "know-how" of the SKF crew and, perhaps most important, the extensive TV experience of most of the participants in the M.C.I. colorcasts assures a program of excellent picture quality. As to information content, viewers of past programs know there is no assurance needed on this score.

Michigan Clinical Institute

Technical Exhibits-1957

Abbott Laboratories North Chicago, Ill.

Booth No. 10

The new sedative, tranquilizer and antihypertensive, NEMBU-SERPIN® Filmtabs® will be among new products exhibited by Abbott Laboratories. Also shown will be the new non-barbiturate hypnotic, PLACIDYL®; DESBUTAL®; ERYTHROCIN® Filmtabs; IBEROL® Filmtabs; OPTILETS® Filmtabs; VI-DAYLIN®; SELSUN®; PENTOTHAL® SODIUM; and Abbott's complete line of intravenous solutions and equipment.

A. S. Aloe Company St. Louis, Mo.

Booth No. 62

Visit Space No. 62 where the A. S. Aloe Company will have on display a cross-section of their most complete line of physicians' equipment and supplies. Tom and Wallic Boufford will be on hand to greet you and they will certainly appreciate the opportunity of discussing mutual items of interest with you.

American Cyanamid Company Surgical Products Division Danbury, Conn.

Booth No. 63

American Cyanamid Company Surgical Products Division, manufacturers of Davis & Geck brand sutures and other surgical specialties, will feature new suture packaging, Surgilar and Surgilope R, designed to eliminate broken glass from the operating room. All the popular atraumatic R needle-suture combinations are included in the Surgilar product line. Other products of interest include Aureomycin R surgical dressings and Melacast orthopedic bandages.

American Ferment Company, Inc. New York, N. Y.

Booth No. 73

Stop at Booth No. 73 for your personal supply of Falgos, the buffered compound analgesic that acts quickly and without gastric upset. Let us also explain the advantages of Caroid & Bile Salts Tablets, Alcaroid Antacid, and Supligol, the whole bile-ketocholic acid compound.

Ames Company, Inc. Elkhart, Indiana

Booth No. 9

The Ames exhibit will introduce a new and unique concept in sedation—a new calmative drug—NOSTYN. NOSTYN is chemically and physiologically unrelated to any available compound. NOSTYN allays anxiety and tension with the power of gentleness; possessing a wide margin of safety, NOSTYN avoids depression or drowsiness.

Audio-Digest Foundation Glendale, Calif.

Booth No. 75

Audio-Digest Foundation—a subsidiary of the California Medical Association—gives the busy physician an effortless tour through the best of current medical literature each week. This medical tape-recorded "newscast"—compiled and reviewed by a professional Board of Editors—may be heard in the physician's automobile, home or office. The Foundation also offers medical lectures by nationally-recognized authorities.

Audograph Company Detroit, Mich.

Booth Nos. 16, 17

The sales booth is a series of panels of alternating color in the form of a screen 20 feet wide. Four

large panels of dark blue bear the name GRAY. The other panels are composed of shades complimentary to this basic color and carry at the top of the panel the various Gray systems. Four tables with concealed wiring, blond finished with appropriate decals and standing on wrought-iron legs bear the equipment to be displayed.

Ayerst Laboratories Chicago, Ill.

Booth No. 7

The Ayerst Laboratories exhibit features "Premarin" Intravenous, for the rapid control of various types of hemorrhages. Physicians are cordially invited to visit Booth No. 7 for information on "Premarin" Intravenous and other Ayerst specialties.

Baby Development Clinic Chicago, Ill.

Booth No. 33

BABY DEVELOPMENT CLINIC, Booth No. 33, invites doctors to visit its space and become familiar with the NEW LIFEBOUY with TMTD to protect and prevent odor of perspiration. Literature available, as well as samples for personal use and clinical testing. ALSO REGISTER for sample jars of TUCKS for comfort and care of patients who have had episiotomies, hemorrhoids, or anorectal surgery.

Baker Laboratories, Inc. Cleveland, Ohio

Booth No. 50

You are invited to visit our booth where Baker's Modified Milk and Varamel, two successful products for infant feeding, are on display. Baker representatives will be glad to discuss the practical application of Grade A milk, adjusted fat composition, zero curd tension, synthetic vitamins and other important factors which help to eliminate many of the problems in modern infant feeding.

Bristol-Myers Products Division New York, N. Y.

Booth No. 57

Please stop by for information on BIOGELS, an original and unique development for effective control of constipation. A personal supply of BUFFERIN, the faster acting, better tolerated salicylate; and AMMENS Medicated Powder, a dispersion of talc in cornstarch, is also available.

Ciba Pharmaceutical Products, Inc. Summit, N. J.

Booth No. 11

CIBA is featuring two prescription specialties—RITALIN, a new mild stimulant-antidepressant and DORIDEN, a nonbarbiturate hypnotic-sedative. RITALIN raises depressed patients to normal levels of psychomotor activity without amphetamine-like overstimulation or depressive rebound. Nonhabit-forming DORIDEN is already being widely used as a safe, barbiturate replacement. Representatives will be present to answer queries on these very effective agents.

Coca-Cola Company Atlanta, Ga.

Booth Nos. 65, 66

Ice-cold Coca-Cola served through the courtesy and co-operation of the Detroit Coca-Cola Bottling Company and The Coca-Cola Company.

Cunningham Drug Stores, Inc.
Detroit, Mich.

Booth No. 42

We cordially invite you to visit our exhibit showing some of the services offered to you and your patients by "your friendly Cunningham Drug Stores."

Desitin Chemical Company
Providence, R. I.

Booth No. 22

DESITIN OINTMENT: the pioneer in external cod liver oil therapy.

Indications: diaper rash, slow healing wounds, burns of all degrees, lacerations, hemorrhoids and fissures.

DESITIN POWDER: a unique, dainty medicinal powder saturated with cod liver oil.

DESITIN HEMORRHOIDAL SUPPOSITORIES with **COD LIVER OIL:** coats ano-rectal area with soothing, lubricating cod liver oil, gives prompt relief of pain, allays itching.

DESITIN LOTION: the original cod liver oil lotion, soothing, protective, mildly astringent and healing, in non-specific dermatitis, pruritus, poison ivy, etc.

RECTAL DESITIN OINTMENT: A unique formula, providing rapid and effective relief in simple hemorrhoids, pruritus ani, fissures, etc. Does not contain narcotics, local anesthetics, styptics to mask any serious symptoms.

Detroit Creamery Company
Detroit, Mich.

Booth No. 14



The Detroit Creamery Company, local distributors of Sealtest Milk and Dairy Products, invite you to

stop at the Sealtest booth and enjoy a complimentary bottle of Sealtest Milk.

Detroit X-Ray Sales Company
Detroit, Mich.

Booths Nos. 40, 41

We take pleasure in having the opportunity of exhibiting our latest developments in diagnostic x-ray equipment, and an additional line of Grenz Ray Therapy apparatus.

We extend a cordial invitation to visit our booth and discuss your radiological problems with our staff.

Dietene Company
Minneapolis, Minn.

Booth No. 60

Have YOU tasted MERITENE . . . the whole protein supplement that DOES taste good? Visit our booth, enjoy a MERITENE Milk Shake with its multiple nutritive values.

While you're there, review the Dietene Diet based on DIETENE Reducing Supplement. It provides the rare combination of low calories (1000) with high intake of protein and all essential vitamins and minerals in an interesting, effective, SAFE weight reducing diet.

Doho Chemical Corporation
New York, N. Y.

Booth No. 25

AURALGAN, ear medication in Otitis Media and removal of Cerumen;

OTOSMOSAN, effective, non-toxic Fungicidal and Bactericidal (Gram negative-Gram positive) in the suppurative and aural dermatomycotic ears;

RHINALGAN, nasal decongestant free from systemic or circulatory effect and equally safe to use on infants as well as the aged.

NEW LARYLGAN, soothing throat spray and gargle for infectious and non-infectious sore throat involvements.

Mallon Chemical Corporation, Subsidiary of the Doho Chemical Corporation, is also featuring:

RECTALGAN, liquid topical anesthesia, for relief of pain and discomfort in hemorrhoids, pruritus and perineal suturing.

DERMOPLAST, aerosol freon propellant spray for fast relief of surface pain, itching, burns and abrasions. Also Obs. & Gyn. use.

Eaton Laboratories, Inc.
Norwich, N. Y.

Booth No. 38

Published reports show that Furadantin® is one of the most effective and rapidly acting agents available at this time for the treatment of prostatitis and acute and chronic urinary tract infections.

Furadantin has specific affinity for the urinary tract, producing antibacterial concentration in thirty minutes. Time-consuming trial and error with less effective agents is eliminated.

Ferndale Surgical, Inc.
Ferndale, Mich.

Booth No. 43

Surgical instruments, diagnostic and examination equipment, Pharmaceutical specialties of our own manufacture. Inquiries on special formulas will be welcomed.

Geigy Chemical Corporation
Yonkers, N. Y.

Booth No. 5

The Geigy exhibit will feature PRELUDIN—the new chemically different appetite suppressant noted for its absence of side actions. Also on display will be BUTAZOLIDIN—potent nonhormonal antiarthritic; new STEROSAN Hydrocortisone Ointment-anti-inflammatory, bacteriostat and fungistat, and other well known Geigy products.

Gerber Products Company
Fremont, Mich.

Booth No. 30

WHEN MILK IS CONTRAINDICATED as the basic food for infants, Gerber "Meat Base Formula" can provide a nutritionally adequate replacement. It is well accepted and tolerated by infants of all ages. Your Gerber detailman invites you to evaluate "Meat Base Formula" and the complete line of supplementary baby foods.

Hack Shoe Company
Detroit, Mich.

Booth No. 3

Entering "Our 42nd Year of Service to the Profession" *Showing*

(a) **RIPPLE SOLES.** "The Shoes that Walk for You"

Styles for Men, Women and Children
Try them on at the meeting.

(b) **SUPPORTIVE SHOES** for men, women and children

(c) **Hack Pigeon Toe Shoes**

(d) **Hygienic shoes**—of regular construction—for children's normal feet.

G. A. Ingram Company
Detroit, Mich.

Booth Nos. 67, 68

Instant Sanka Coffee
White Plains, N. Y.

Booth No. 1

Are you familiar with **INSTANT SANKA COFFEE**? Your coffee-loving patients will love it. Designed not to make people nervous or jumpy, Instant Sanka is 100 per cent pure coffee with 97 per cent of the caffeine removed. Stop by for a cup often during your meeting . . . the proof is in the testing. And be sure to register for professional samples and booklets.

A. Kuhlman & Company
Detroit, Mich.

Booth No. 32

A. Kuhlman & Company invites you to see Castle's new No. 999 Autoclave in operation. This large

capacity double-shell office autoclave offers unmatched simplicity, safety, and style. We shall also display the latest diagnostic and surgical instruments as well as physicians examining room furniture.

Lea & Febiger
Philadelphia, Pa.

Booth No. 70

Be sure to see these new books and new editions: Blinick and Kaufman—Modern Office Gynecology; Zimmerman, Netsky and Davidoff—Atlas of Tumors of the Nervous System; Stimson and Hodes—Common Contagious Diseases; Wintrobe—Clinical Hematology; Stimson—Manual of Fractures and Dislocations; Cushman—Strabismus; Bell—Pathology; Epstein—Skin Surgery; Katz and Pick—Clinical Electrocardiography; Soffer—Diseases of the Endocrine Glands; Wohl and Goodhart—Modern Nutrition in Health and Disease; Lewin—The Back and Its Disk Syndromes; Holmes and Robbins—Roentgen Interpretation; and many other books of current medical interest.

Lederle Laboratories
Pearl River, N. Y.

Booth No. 26

You are cordially invited to visit the Lederle Booth where our Medical Representatives will be in attendance to provide the latest information and literature available on our line. Featured will be Achromycin, Diamox, Vitamins, Pathilon, Varidase, and many other of our dependable quality products.

Liebel-Flarsheim Company
Cincinnati, Ohio

Booth No. 48

The Liebel-Flarsheim Company cordially invites you to visit the booth in which their latest electromedical-electrosurgical equipment will be exhibited. We ask particularly that you stop and see the L-F Basal-Meter, the first automatic, self-calculating metabolism unit ever offered. Capable representatives will be on hand at all times.

Eli Lilly & Company
Indianapolis, Ind

Booth Nos. 54, 55

You are cordially invited to visit the Lilly exhibit located in space Nos. 54 and 55. The display will contain information on recent therapeutic developments. Lilly sales people will be in attendance. They welcome your questions about Lilly products.

Maico Detroit Company
Detroit, Mich.

Booth No. 69

The new Maico Hearing Aid weighing less than one-half ounce is so small that the entire unit consisting of transmitter, microphone, receiver, battery and ear mold is worn in the ear. A complete line of instruments to take care of cases from the borderline to the profoundly deaf. 90 per cent of all precision hearing test instruments used in America by ear physicians are Maico.

Mead Johnson & Company
Evansville, Ind.

Booths Nos. 71, 72

Medco Products Company
Tulsa, Okla

Booth No. 20

Presenting the MEDCO-SONLATOR. Providing a new concept in therapy by combining muscle stimulation and ultra sound simultaneously through a SINGLE Three-Way Sound Applicator. The MEDCO-SONLATOR is a distinct advance in the effectiveness of physical therapy in your office or hospital. A few minutes spent in our booth should prove of value to your practice.

Medical Aids, Inc.
Park Ridge, Ill.

Booth No. 36

Medical Aids, Incorporated, will feature a complete line of pressure bandages, including the well-known

DALZOFLEX and PRIMER Combination, recommended in the treatment of leg ulcers, phlebitis, etc.; the NULAST Elastic Crepe bandage, constructed of Viscolax rubber threads, DALMAS elastic strapping, which is waterproof, oil and grease resistant. LITE-NET and CLAYS elastic stockings.

Medical Protective Company
Fort Wayne, Indiana

Booth No. 34

MALPRACTICE PROPHYLAXIS . . . Less Malpractice Publicity for public consumption, Individual Insurance invulnerable to charges of a "doctors' combine," Periodic Information to policyholders, Fighting Defense, Insurance Diagnosis that eliminates contribution, Avoidance of Insurance Over-dose that bring litigation and large losses, plus the "Know-how" of Specialized Service make Medical Protective policyholders safer.

Merck Sharp & Dohme
Philadelphia, Pa.

Booth No. 21

The Merck Sharp & Dohme exhibit presents highlights on steroid therapy featuring the newer adrenal cortical steroid preparations in endocrine disorders, collagen diseases, respiratory allergies, eye diseases and skin conditions. Research developments in the field of antibacterial agents are of clinical significance. Expertly trained personnel will be pleased to discuss advanced clinical reports on a new therapeutic agent which may be described as a "mood stabilizer."

Meyer and Company
St. Clair Shores, Mich.

Booth No. 15

ATHEMOL—A new compound which has been highly successful in the management of arteriosclerosis will be presented by Meyer and Company. **ATHEMOL REDUCES SERUM CHOLESTEROL AND RELIEVES THE PATIENT'S SUBJECTIVE COMPLAINTS.** **ATHEMOL IS EASILY TOLERATED BY ALL PATIENTS; NO SIDE EFFECTS OR TOXICITY HAVE BEEN REPORTED.** **ATHEMOL IS AN INEXPENSIVE AND EFFECTIVE TREATMENT FOR ARTERIOSCLEROSIS.**

Michigan Medical Service
Detroit, Mich.

Booth No. 4

You are cordially invited to visit our booth to obtain current information regarding Michigan Medical Service (Blue Shield). Our representatives will gladly visit with you and answer any questions you may have with regard to your Blue Shield Plan.

Milex Products
Oak Park, Mich.

Booth No. 52

Featuring a complete line of unique GYNECIC SPECIALTIES which include the Crescent Diaphragm with built-in-insert, Oligospermia cups, pre-coital douche, basal temperature thermometer, Trichosan, and a Cancer Detection Unit. Also a new product for pre-menstrual tension and dysmenorrhea and a "Doctor's Marital Guide" for patients, in two editions.

Miller Surgical Company
Chicago, Ill.

Booth No. 61

See the Miller Electro Surgical Units and accessories such as Snares, Suction-Coagulation attachments, Forceps, etc. A complete line of Diagnostic Equipment consisting of illuminated Oscopes, Ophthalmoscopes, Eyespud with Magnet, Transillumination Lamps, Mirror Headlite, Vaginal Speculum with Smoke Ejector and Gorsch Operating Scopes and Stainless Steel Proctoscopes, all sizes, with magnification, will also be on display.

C. V. Mosby Company
St. Louis, Mo.**Booth No. 24**

The Mosby Company will exhibit its complete line of medical books and journals at the Michigan Clinical Institute. Included among the most recent releases will be the following: Bard "Medical Physiology," Bray "Clinical Laboratory Methods," Anderson "Synopsis of Pathology," DeSanctis-Varga "Handbook of Pediatric Medical Emergencies," Forster "Modern Therapy in Neurology," Gradwohl "Clinical Laboratory Methods and Diagnosis," Haymaker "Bing's Local Diagnosis in Neurological Diseases," Leider "Practical Pediatric Dermatology," Meakins "Practice of Medicine," Richards "Surgery for General Practice," Sodi-Pallares "New Bases for Electrocardiography," Sutton "Diseases of the Skin" and Ulett-Goodrich "A Synopsis of Contemporary Psychiatry."

Parke, Davis & Company
Detroit, Mich.**Booth No. 31**

Medical service members of our staff will be in attendance at our exhibit for consultation and discussion of various products. Important specialties, such as Penicillin S-R, Benadryl, Ambodryl, Dilantin Suspension, Vitamins, Eldec, Oxyel, Milontin, Amphebase, Chloromycetin, Thrombin Topical, etc., will be featured. You are cordially invited to visit our exhibit.

Pet Milk Company
St. Louis, Mo.**Booth No. 37**

We shall be pleased to have you stop and discuss the variety of time-saving material available to busy physicians. Our representatives will be on hand to discuss the merits of "Pet" Evaporated Milk for infant feeding and INSTANT "Pet" Nonfat Dry Milk for special diets. A miniature "Pet" Evaporated Milk can will be given to all visitors.

Purdue Frederick Company
New York, N. Y.**Booth No. 47**

SENOKOT Tablets and Granules—new non-bulk, non-irritating constipation corrective acting selectively on the parasympathetic (Auerbach's) plexus in the large bowel, physiologically stimulating the neuromuscular defecatory reflex.

PRE-MENS—the multidimensional premenstrual tension therapy.

SOMATOVITE—clinically proven to promote weight gain, increase appetite and reduce hyperactivity and restlessness.

SIPPYPLEX—the modern comprehensive therapy for peptic ulcer.

Randolph Surgical Supply Company
Detroit, Mich.**Booth Nos. 12, 13**

Randolph Surgical will again display the popular Barron Food Pump, with an actual demonstration. Also many other new items that will be of interest to the Medical Profession. Our Booth will be staffed by experienced personnel to assist our many friends.

R. J. Reynolds Tobacco Company
Winston-Salem, N. C.**Booth No. 44**

Welcome to the R. J. Reynolds Tobacco Company Exhibit! You are cordially invited to receive a cigarette case (monogrammed with your initials) containing your choice of CAMEL, WINSTON Filter, Menthol Fresh SALEM, or CAVALIER King Size Cigarettes.

A. H. Robins Company, Inc.
Richmond, Va.**Booth No. 28**

Physicians attending the meeting of the Michigan Clinical Institute are extended a cordial invitation to visit the exhibit of the products of the A. H. Robins Company. Experienced medical representatives will be in attendance to welcome you and answer inquiries relative to any of Robins prescription specialties.

Ross Laboratories, Inc.
Columbus, Ohio**Booth No. 29**

ROSS LABORATORIES: CURRENT CONCEPTS IN INFANT FEEDING, stressing the critical aspects of preventive care. Your Similac Representative will be happy to discuss the role of physiologic feeding in providing good growth, sound development, and optimum clinical benefits. Copies of the latest Ross Pediatric Research Conference Reports are available.

Rupp & Bowman Company
Berkley, Mich.**Booth No. 58**

The Rupp and Bowman Company cordially invites you to visit exhibit Booth No. 58. Our display will feature diagnostic instruments, equipment and surgical supplies.

Sanborn Company
Cambridge, Mass.**Booth No. 53**

Visitors at the Sanborn Company Booth No. 53 will have full opportunity to see and have demonstrated our clinical diagnostic instruments such as the popular Viso-Cardiette and Metabulator.

In addition, there will be demonstrations and/or data available on the Vector System, Viso-Scope, and Transducers for pickup of pressure and other physiologic events; and on the Twin-Viso, Twin-Beam, and the "150" (and other) series of single and multi-channel direct-wiring and photographic recording systems.

Sandoz Pharmaceuticals
Hanover, N. J.**Booth No. 51**

BELLERGA Spacetabs assures around the clock control of functional complaints (example—menopause symptoms) in the periphery where they originate.

CAFERGOT P.B. the most effective oral medication for the relief of migraine headache with G. I. disturbance accompanied by tension.

FIORINAL a new approach to therapy of tension headaches and other head pain due to sinusitis and myalgia.

Any of our representatives in attendance, will gladly answer questions about these and other Sandoz products.

W. B. Saunders Company
Philadelphia, Pa.**Booth No. 2**

Harold Rozema will again be on hand with the complete Saunders line.

Some new titles of special interest include: Tracy: The Doctor as a Witness; Nadas: Pediatric Cardiology; Cecil and Conn: Specialties in General Practice; Artz and Reiss: Burns; Campell: Urology; Friedberg: Diseases of the Heart, 2nd edition; Zimmerman and Levine: Surgical Physiology; Conn: Current Therapy 1957; and a new edition of the famous red Dictionary—Dorland.

Schering Corporation
Bloomfield, N. J.**Booth No. 6**

The Schering exhibit, Booth Space No. 6, presents the Meti-steroid preparations METIMYD, METIDERM, METRETON, SIGMAGEN, METICORTEN and METICORTELONE. Clinical and laboratory data demonstrating the advantages of these new steroids in topical and systemic therapy of allergic and inflammatory diseases are offered. New indications for the Meti-steroids are also presented.

G. D. Searle & Company
Chicago, Illinois**Booth No. 74****Smith, Kline & French Laboratories**
Philadelphia, Pa.**Booth No. 19**

Featured at the SKF Booth this year are three pharmaceutical compounds—Compazine, Sul Spanion and Ecotrin—each of which exemplifies at least one outstandingly unique therapeutic advantage. Featured also are Cytomel and Thorazine. Stop at the SKF Booth; our representatives will be most willing to give you literature and information.

E. R. Squibb & Sons
New York, N. Y.

Booth No. 8

E. R. Squibb & Sons has long been a leader in development of new therapeutic agents for prevention and treatment of disease. The results of our diligent research are available to the Medical Profession in new products or improvements in products already marketed.

At Booth No. 8, we are pleased to present up-to-date information on these advances for your consideration.

Stuart Company
Pasadena, Calif.

Booth No. 39

Swift & Company
Chicago, Ill.

Booth No. 46

Strained Ham, a unique flavor addition to the varieties of Meats for Babies, is announced by Swift & Company. The sweet flavor goodness of Swift's Premium Ham, ground to a smooth, creamy texture, is the newest variety of Strained Meats for infants. See and taste it at the Swift exhibit. You are cordially invited to examine the complete line of these 100 per cent meat products, as well as Swift's Strained Egg Yolks and Swift's Strained Egg Yolks & Bacon for Babies; to discuss with the representatives, Swift's clinical research program in connection with meat in the infant diet.

Testagar & Company, Inc.
Detroit, Mich.

Booth No. 23

You will be welcome at Testagar & Co., Inc., Booth No. 23, to receive samples and literature on our newest product release, Ascorbacaine Capsules, for pruritus. Ascorbacaine Capsules are a combination of Oral Procaine, 250 mg., and Ascorbic Acid, 150 mg., per capsule. Several other brand new products will be shown.

Thompson Recorder Company
Detroit, Mich.

Booth No. 35

Pierce Magnetic Belt Dictating equipment is portable, the magnetic belt is mailable. Reproduction of voice, by magnetic recording results in natural reproduction, and hence secretaries enjoy typing. Because of the magnetic principle, men have availability to rechoose and correct words and phrases and therefore send error free dictation to a secretary. Belts are reusable, 10,000 times.

S. J. Tutag & Company
Detroit, Mich.

Booth No. 56

S. J. TUTAG & COMPANY will present the new Quadamine. Quadamine (Granucap*) is a "timed disintegration" type capsule containing an appetite depressant-mood elevator, a mild sedative to counteract central nervous stimulation of amphetamine, 6 essential vitamins and 6 important minerals. Quadamine is especially designed for use in (1) obesity, (2) anxiety states and (3) nervous or agitated states.

*Tutag brand of timed disintegration capsule (Pat. Pend.)

Upjohn Company
Kalamazoo, Mich.

Booth No. 18

Members of the medical profession are invited to visit the Upjohn booth where members of The Upjohn Company professional detail staff are prepared to discuss subjects of mutual interest.

U. S. Vitamin Corporation
New York, N. Y.

Booth No. 49

Exhibit features PANTHO-F, a strikingly effective combination of inflammatory-suppressive hydrocortisone 1% with antipruritic, epithelizing pantothenylol 2% (Panthoderm). For quick relief of pain, inflammation and itch, and rapid healing of eczemas, der-

matoses, topical ulcers, pruritus, slow healing wounds, bites, stings, burns, etc. Also available: Pantho-F 0.2% (hydrocortisone 0.2% with pantothenylol 2%). Professional samples and literature distributed also on our complete line of nutritional and pharmaceutical specialties.

Wallace Laboratories
New Brunswick, N. J.

Booth No. 59

MILTOWN, the original meprobamate, will be featured at the Wallace Laboratories' exhibit, booth 59. It is a type of tranquilizer with muscle relaxing action. It is of value in treating anxiety-tension states, muscle spasm, sleeplessness due to worry and certain neurological disorders. It is of special interest that MILTOWN does not have autonomic side effects, is well tolerated and is essentially non-toxic.

Westwood Pharmaceuticals
Buffalo, N. Y.

Booth No. 27

Fostex Cream and Fostex Cake are new, easy to use, therapeutically effective cleansing-type medications for the treatment of dandruff, acne vulgaris and seborrheic dermatitis. They contain Sebulytic* a unique combination of penetrating anionic soapless cleansers and wetting agents which are highly antiseborrheic, and exert antibacterial and keratolytic effects.

*Trademark.

Wyeth Laboratories
Philadelphia, Pa.

Booth No. 64

Wyeth will feature: EQUANIL® (meprobamate*), unique anti-anxiety agent that relaxes mental tension and muscle spasm. EQUANIL effectively tranquilizes anxious, tense or psychoneurotic office patients as seen in everyday practice. It is relatively free from untoward side reactions, and it is not habit-forming. PEN.VEE.Oral® (penicillin V), Tablets, the new acid-stable penicillin that resists destruction by acid in the stomach. Absorption from the duodenum is maximal, therefore, blood levels are high. For treatment and prophylaxis of infections caused by penicillin-sensitive organisms.

*Licensed Under U. S. Patent No. 2,724,720.

Zimmer Manufacturing Company
Warsaw, Indiana

Booth No. 45

A complete line of Fracture Equipment and Orthopedic Instruments will be on display. Items of special interest, BADGLEY NAIL AND PLATE for intracapsular fractures, SCHNEIDER SELF-BROACHING INTRAMEDULLARY PINS, "UNDERWRITERS APPROVED" EXPLOSION PROOF LUCK BONE SAW AND BROWN-ELECTRO DERMATOME and STRONG TRACTION APPARATUS for reduction of Colle's fracture. ZIMMER, your guarantee of quality and prompt service.

Retroperitoneal tumors can attain an enormous size without causing significant symptoms.

* * *

Troublesome enlarged hemorrhoids and rectal tenesmus are prominent in patients with presacral neoplasms.

* * *

The ratio of malignant to benign retroperitoneal tumors was 4 to 1 in a series of 156 such neoplasms.

* * *

Discovery of an abdominal non-tender mass is the most frequent single sign of a retroperitoneal tumor.

* * *

More cancers will be discovered by the widespread use of a minimum or standard type of examination than by the restricted use of a more elaborate examination.

Michigan's Department of Health

Albert E. Heustis, M.D., Commissioner

GROUPS MAKE HEALTH RECOMMENDATIONS FOR 1957-58

Some of the Michigan Department of Health budget requests for 1957-58 have been appraised by two health study groups.

Appointed by Governor Williams, a twenty-five member Public Health Study Commission has issued a twenty-three-point report on health and welfare programs.

A more than 100-member Citizens Public Health Advisory Committee, sponsored by the Michigan Public Health Association, has evaluated and made recommendations on seven proposals which were chosen by this group for priority study.

Issues considered by both groups are:

State Aid for Local Health Departments.—Support is given by both groups to requesting increased state aid for local health departments from the current level of \$400,000 to \$600,000. The \$600,000 is cited as a "basic minimum" needed. The Citizens Committee urged that the amount requested should be further increased at the discretion of the State Health Commissioner. The Public Health Study Commission recommended that studies be made of the fund distribution formula governing state aid for local health departments, and of the twelve Michigan counties without local health departments.

Poliomyelitis Vaccine.—Both groups urge that the Michigan Department of Health be granted funds to purchase poliomyelitis vaccine for 400,000 persons, including children reaching immunizable age, children one through fourteen years of age who have not been immunized, and for persons in other age groups. The Public Health Study Commission expressed belief that the State Health Department should look forward to handling poliomyelitis vaccine in a manner as similar as possible to the handling given other biologics. Both groups urged extensive publicity campaigns on poliomyelitis immunization.

Tuberculosis Post-Sanatorium Care.—The groups support a proposal which would grant state financial assistance to counties in providing supervised post-sanatorium care for tuberculosis patients whose return home has been approved.

Trial Mental Health Programs.—The Public Health Study Commission recommends that an appropriation be made for a program aimed toward prevention of relapse in mental illness to be worked out jointly by the Michigan Department of Mental Health and the Michigan Department of Health. The Citizens Public Health Advisory Committee recommends that funds be provided through the Michigan Department of Health

for the first year of a three-year demonstration program to show how public health nursing service can aid mental patients discharged from hospitals to their homes on a convalescent basis. The Citizens Committee also urges that supplementary funds be sought from private sources for this project.

Licensure of Nursing Homes and Homes for the Aged.—Both groups recommend that funds requested for this purpose by the Michigan Department of Health be appropriated as necessary to carry out this service which is required under law.

Consultant Team Approach in Long-Term Illness.—As one of a series of recommendations related to long-term illness, the Public Health Study Commission calls for unequivocal support through the Michigan Department of Health budget for regional traveling consultant teams which would work with nursing homes to help provide efficient and high grade care. The Citizens Public Health Advisory Committee recommends that a team of workers be provided on the Michigan Department of Health staff to help communities and institutions develop effective and co-ordinated programs against long-term illness.

Air Pollution Control.—A recommendation supported by both study groups appeals for legislative action to officially place air pollution control under jurisdiction of the Michigan Department of Health.

Other Proposals.—The Public Health Study Commission has made recommendations pertaining to chronic disease hospital facilities, training programs for persons dealing with various aspects of care for the aged, nursing home care programs, medical care for the needy and low-income groups, mental health, crippled children, fluoridation, home and traffic accidents, migrant worker's health, vocational rehabilitation and expanded facilities for the training of doctors. Recommendations also were made urging establishment of an interdepartmental committee of heads of appropriate state agencies and a task force on the shortage of professional health personnel.

The gastric mucosal folds end at the rolled margin of the carcinoma, while in gastric ulcer they fade out gradually into the surrounding edematous area.

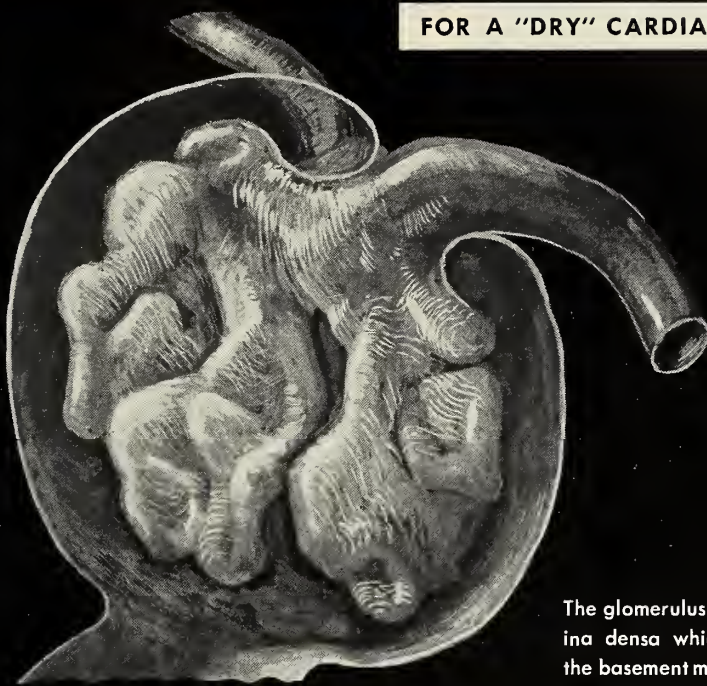
* * *

The symptoms of bladder involvement by endometriosis are variable and hematuria may not be present.

* * *

Local fulguration or open operation for endometriosis of the bladder are the treatments of choice. Treatment must be individualized and planned to meet the patient's needs and interest.

FOR A "DRY" CARDIAC PATIENT . . .



The glomerulus is invested in the lamina densa which is continuous with the basement membranes of the outer capsular epithelium.

Illustration by Hans Elias

Rolicton[®] Diuresis Maintains Continuous Edema Control

The efficacy of Rolicton (brand of amismetradine) in maintaining diuresis in the edematous patient has been established on an average dosage of one tablet b.i.d. Larger doses may be given as initial therapy and as maintenance therapy in edema difficult to control. Many patients will respond to one tablet daily.

"The margin of safety and the diuretic index is certainly an improvement over the use of oral mercurial diuretics."¹

Avoiding "Peaks and Valleys"

A highly desirable effect, and one which has been made possible with Rolicton, is the maintenance of continuous diuretic effectiveness day after day over an extended period, to avoid the up-and-down weight pattern typical of other edema-control methods.

"There was an obvious stabilization of weight in practically all of the patients under observation, and previous wide fluctuations in poundage disappeared."²

Mercury-Sparing


Typical of the Rolicton diuresis pattern is the ability of the drug to reduce and, in a large percentage of patients, to eliminate the need for mercurials parenterally.

"... the drug represents a most useful addition to our armamentarium in the treatment of edema, not only because it can be given orally ... but more so because it permits [us] to replace or to spare the ... mercurials."³

G. D. Searle & Co., Chicago 80, Illinois.
Research in the Service of Medicine.

1. Asher, G.: Personal communication, June 23, 1956.
2. Settel, E.: A Clinical Evaluation of a New Oral Diuretic, Rolicton, *Postgrad. Med.*, Feb. 1957, in press.
3. Goldner, M. G.: Personal communication, June 29, 1956.

SEARLE




**PROVEN
PAIN CONTROL**

with sedation

GRADATIONS OF ANALGESIA
with light sedation


'EMPIRAL'®

Phenobarbital	gr. ¼
Acetophenetidin	gr. 2½
Acetylsalicylic Acid	gr. 3½




'CODEMPIRAL'® No. 2^(N)

Codeine Phosphate	gr. ¼
Phenobarbital	gr. ¼
Acetophenetidin	gr. 2½
Acetylsalicylic Acid	gr. 3½




'CODEMPIRAL'® No. 3^(N)

Codeine Phosphate	gr. ½
Phenobarbital	gr. ¼
Acetophenetidin	gr. 2½
Acetylsalicylic Acid	gr. 3½



(N) subject to Federal Narcotic Law



BURROUGHS WELLCOME & CO. (U. S. A.) INC.
Tuckahoe, N. Y.

Legal Opinions

Dear Mr. Burns:

You submitted the following inquiry received from a County Society:

1. "Where does a doctor stand when he makes one charge for cash, and another for credit? The credit charges are usually about double and the implication is that the cash charge is a discount."

From a legal standpoint, I find no problem. I know of no legal restriction upon the right of a physician to fix his charges for services and to give discounts for cash payments. In the absence of an express agreement between the physician and patient his charges are subject only to the test of "reasonableness."

I assume that my opinion as to the propriety, good taste or ethics of such practice is not sought and I therefore express no opinion thereon.

The second inquiry is as follows:

2. "If we expel a man or deny him membership for ethical reasons, are we liable if we tell the inquiring public that he applied for but was denied membership?"

I assume that the purpose of this inquiry is to ascertain the possible liability for damages for libel, slander or defamation of character. It is dangerous to generalize in this area but I think it may be said safely that the mere statement in answer to an inquiry that "X" has been denied membership in a voluntary medical society or that he has been expelled therefrom is not actionable if such statement is true, is not actuated by malice and such denial of membership or expulsion has been accomplished legally under the by-laws of the society.

From this, however, it should not be implied that it is safe practice to disclose any and all information upon which action has been predicated by the society or to express opinion or make statements with respect to the reasons therefor. Many statements made within the organization during the course of proceedings under its by-laws might have the protection of some degree of privilege which they would not have if made elsewhere. The circumstances under which statements that reflect upon another are made are usually important in determining legal liability therefor.

The law pertaining to libel, slander and defamation is so complex and confusing that no useful purpose could be served by attempting a general discussion of it here. Suffice it to say, therefore, that although I have answered the specific question asked, I recommend that caution be exercised in applying it to any set of circumstances other than the specific circumstances outlined in the question.

Very truly yours,
Lester P. Dodd,
Legal Counsel

November 6, 1956

* * *

Dear Mr. Burns:

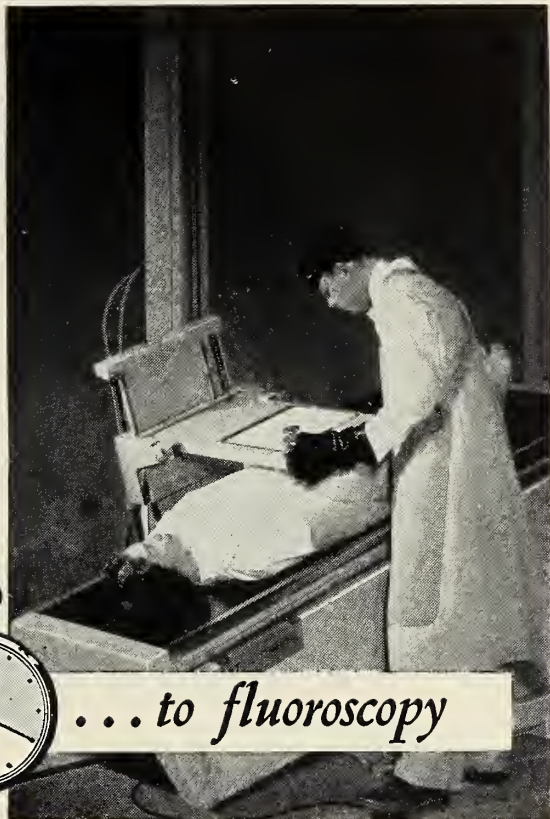
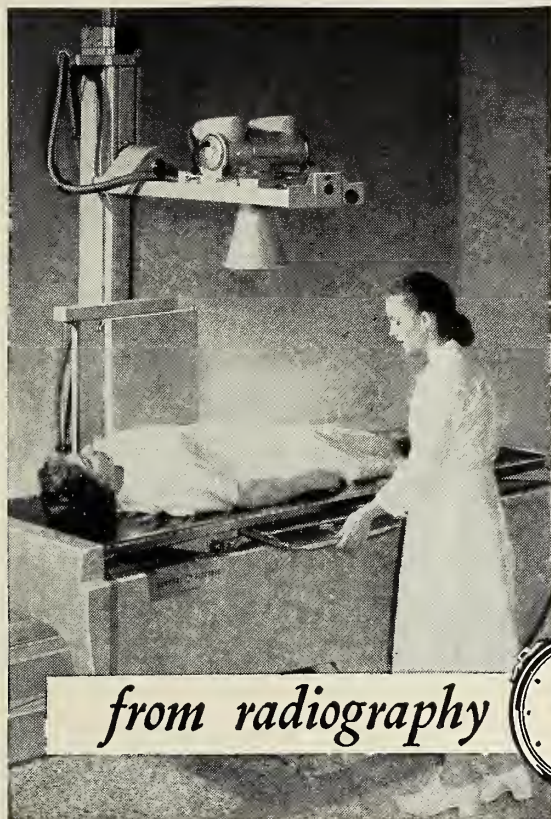
You have referred to me for opinion an inquiry from a member concerning the scope of the activities in which the doctor's receptionist and office assistant may properly engage in connection with dispensing medication.

Apparently the inquiry was prompted by statements made to the doctor by an investigator of the State Board of Pharmacy and concerns itself primarily with whether or not acts of the employee might constitute violation of the Pharmacy Act.

Section 14 of the Act (14.736 M.S.A.) makes it unlawful for anyone but a registered pharmacist to have

(Continued on Page 244)

PATRICIAN / *a General Electric product* *in step with your progress*



from radiography  *... to fluoroscopy*

...in a matter of seconds

—and those seconds are *split* in radiography with Patrician's stop-motion 200-ma, 100-kvp, full-wave power. Involuntary movements of patients or organs no longer need be your problem — nor the heavy investment formerly required for x-ray equipment capable of overcoming them.

At a price competitive with low-power, limited-range apparatus, you can now enjoy *full* x-ray facilities offered by the General Electric Patrician: kenotron-rectified output for longer x-ray tube life... 81-inch angulating table for those tall patients... double-focus rotating-anode tube for radiography and

fluoroscopy . . . highly maneuverable independent tube stand . . . fully counterbalanced fluoroscopic screen . . . compact, simplified control unit.

Before investing in x-ray equipment, get the complete Patrician story, including G-E financing plans. Use this handy coupon.



X-RAY DEPARTMENT
GENERAL ELECTRIC CO.
Milwaukee 1, Wisconsin

- ☐ Please send me your 16-page PATRICIAN bulletin
- ☐ Facts about deferred payment
- ☐ MAXISERVICE rental

Name.....

Address.....

City.....Zone.....State.....

Progress Is Our Most Important Product

GENERAL  ELECTRIC

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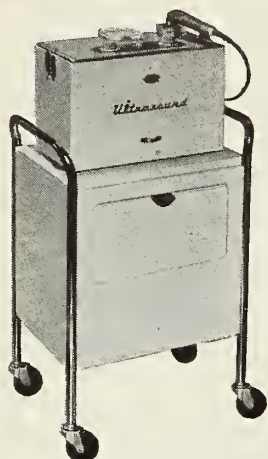
DETROIT — 5715 Woodward Ave.
MILWAUKEE — 547 N. 16th St.
DULUTH — 928 East 2nd St.

Resident Representatives:

FLINT — E. F. Patton, 1202 Milbourne
E. GRAND RAPIDS — J. E. Tipping, 1044 Keneberry Way, S.E.

For demonstration visit our booth at the Michigan State Medical Convention.

(Continued from Page 242)



**THE
VERSATILITY
YOU ASKED FOR
THE
ECONOMY
YOU WILL
APPRECIATE**

The New BURDICK UT-4 ULTRASONIC UNIT

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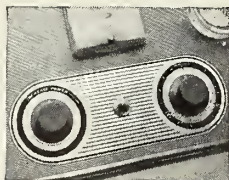
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charge of, engage in or carry on for himself or for another, the dispensing, compounding or sale of drugs, medicines or poisons.

Section 18 of the Act (M.S.A. 14.740) provides that nothing in this Act shall apply to the practice of a practitioner of medicine who is not the proprietor of a drug store, and shall not prevent practitioners of medicine from supplying their patients with such articles as they may deem proper.

Section 30 of the Act (M.S.A. 14.752) provides that nothing in this Act shall be construed to interfere with or preclude any legally practicing physician from prescribing, dispensing, compounding or giving any medicines or poisons to his patients in the regular course of his practice as such physician.

If I correctly understand the status of the employee referred to the doctor, she is not a registered nurse, a licensed practical nurse, or licensed trained attendant and therefore occupies the status of a lay employee such as is referred to in an opinion by Attorney General John R. Dethmers (now Chief Justice of the Michigan Supreme Court), No. 0-4669, July 1, 1946. In that opinion, the Attorney General held that an office girl may, on a physician's orders and instructions, deliver medicines or drugs to patients but may not dispense drugs or fill prescriptions. I am in accord with this opinion and believe that if the employee merely delivers to the patient medicines or drugs out of the doctor's supply which have been ordered by the doctor, she has not violated the provisions of the Pharmacy Act. In short, I do not agree with the investigator's quoted statement that: "only a registered pharmacist can pour medicine from a bottle into an envelope."

Caution, however, should be observed in the application of the foregoing opinion to insure that it is not extended to include acts of the employee beyond the handing out of specific drugs or medicines on the specific orders of the physician. For instance, as was pointed out in the Attorney General's opinion above referred to, if the employee were to give a specific drug or medicine to a patient upon the doctor's order, and the patient were to return later saying that he or she had exhausted the supply, the employee would not be privileged to refill the order as such would require the exercise of judgment as to whether or not additional medication were necessary or proper.

Similarly, I believe that it would be improper for the employee to be entrusted with compounding drugs and in effect filling a physician's prescription. Such would necessarily require a knowledge of and constitute the practice of pharmacy. This is obviously prohibited by the statute.

Very truly yours,
(signed) Lester P. Dodd

October 23, 1956

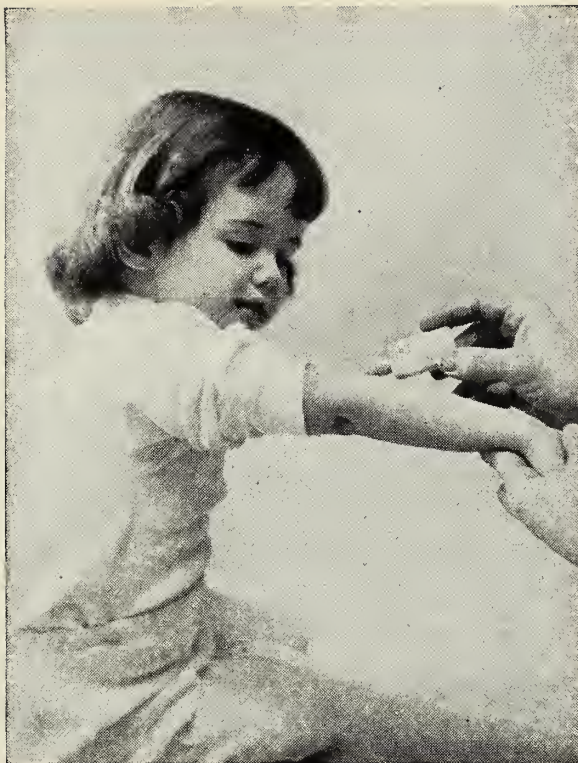
STERILIZATION OF URETERAL CATHETERS

(Continued from Page 195)

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1. Queries and Minor Notes: Sterilization of catheters. J.A.M.A., 144:211, 1950.
2. Kiefer, J. H., and Mitch, M.: Sterilization and storage of catheters. J. Urol., 57:945, 1947.
3. Queries and Minor Notes: Sterilization of cystoscopes and ureteral catheters. J.A.M.A., 74:1536, 1920.
4. Roth, R. B.; Kaminsky, A. F.; and Hess, E.: Bacteriicidal additive for pyelographic media. J. Urol., 74:563-566, 1955.

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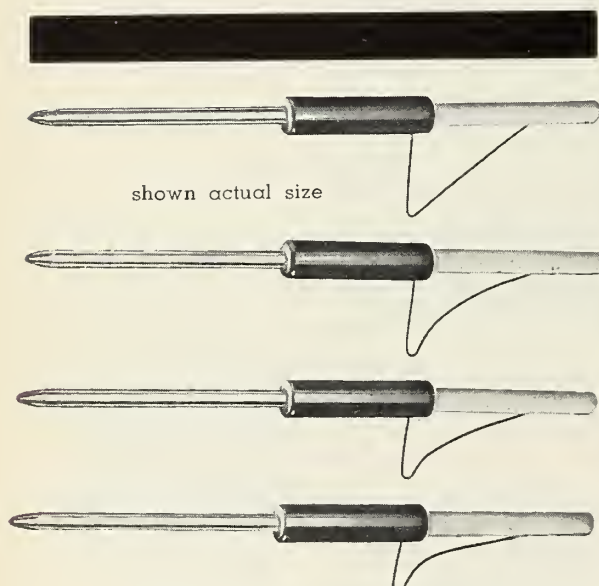
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In Memoriam

Frederick B. Ashton, M.D., one of Highland Park's first doctors died in early December after a long illness. A native of Ontario, he graduated from the Detroit College of Medicine in 1908 and became a member of Highland Park General Hospital staff.

* * *

Ruel N. Dunnington, M.D., of Benton Harbor, died at the age of seventy-four of a heart attack as he prepared to answer a patient's call. A past president of the Berrien County Medical Society, he had practiced in Benton Harbor since 1919, shortly after his graduation from Northwestern University School of Medicine. In 1933, he was appointed district governor of the affiliated Exchange Clubs of Michigan and in 1942 was honored by Northwestern University with an alumni service award.

* * *

James Henry, M.D., Grand Rapids physician for fifty-four years died Nov. 7, 1956, at the age of seventy-nine. A member of the Kent County Medical Society and an emeritus member of MSMS, Dr. Henry was a life resident of Grand Rapids and a graduate of University of Michigan Medical School in 1900. He practiced general medicine until his retirement two years ago.

* * *

Robert E. Mills, M.D., a practicing physician in Boon since 1902, died in October at Cadillac Mercy Hospital following a long illness. He was eighty-two. Dr. Mills retired in 1946 after practicing in Boon since his graduation from Saginaw Medical School. He was a member of AMA and MSMS and an active member of the Boon Baptist Church.

* * *

Kenneth B. Moore, M.D., age fifty-one, died following a heart attack at his home on November 3, 1956. Dr. Moore was a former City Health Officer and dermatologist following postgraduate work at his school of graduation, University of Michigan Medical School. He was a native of Columbiaville and came to Flint forty years ago.

* * *

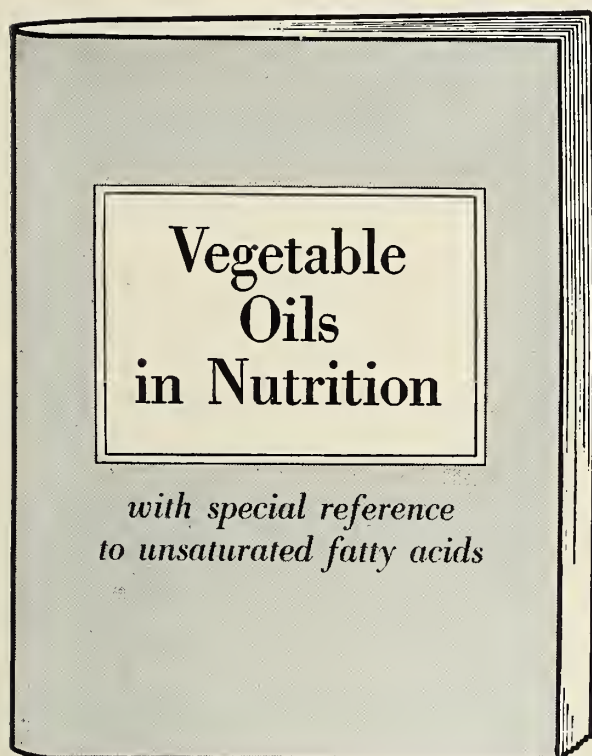
Harry A. Sibley, M.D., seventy-four, of Pontiac, died on July 10, 1956, following a long illness. At time of retirement in 1953, he had been in active practice longer than any other living physician. A graduate of University of Michigan Medical School in 1907, he was a life member of AMA, MSMS and the Oakland County Medical Society, of which he was past president. He served on the Board of Education and was at one time school physician.

(Continued on Page 248)

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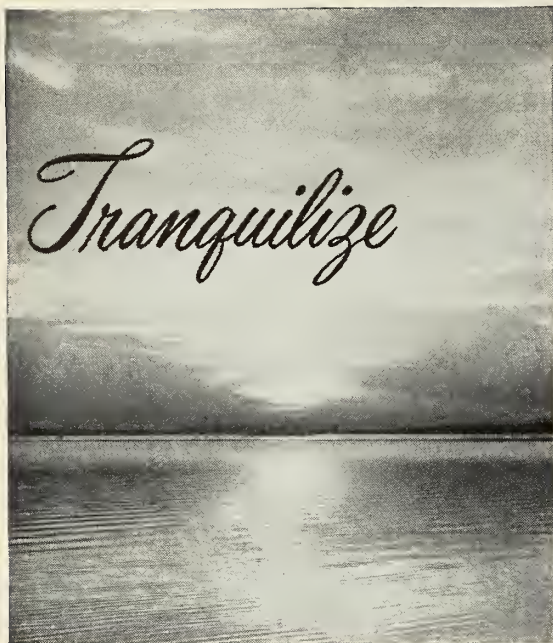
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(Continued from Page 246)

Harvey Spencer, M.D., fifty-nine, associate psychiatrist at the University of Michigan Health Service, died following surgery in Boston in early July. He received his medical degree from Harvard in 1924 and served on that faculty from 1927 to 1938 and later on the staff of the Harvard School of Public Health. He was a member of the Tufts Medical School staff from 1941 to 1943. He was a member of the American Psychiatry Association and the Michigan Society of Neurology and Psychiatry.

* * *

Lewis R. Way, M.D., fifty-eight, prominent Traverse City physician and member of Munson Hospital staff, died on July 9, 1956. He had practiced in Traverse City since 1922 and had been active in medical, social and political circles. He served as county chairman for the Republican party. Dr. Way attended the University of Michigan and received his medical degree from Northwestern University. He was a veteran of two wars, serving in the army medical corps in World War II, accompanying the invasion forces into France.

* * *

Carl V. Weller, M.D., of Ann Arbor, a member of the University of Michigan Medical School faculty and a nationally known pathologist, died in early December of a heart attack at the age of sixty-nine. A faculty member since 1911, Dr. Weller was chairman of the Department of Pathology from 1931 to 1936. He specialized in three fields of research—lung cancer, mustard gas and the biologic aspects of aging. He served as president of the American Association of Pathologists and Bacteriologists, the American Society for Experimental Pathology, the International Academy of Pathology, and the Michigan Pathological Society. Dr. Weller's son, Thomas, received the Nobel Prize for medicine in 1954.

Never give hormones before doing a D and C and biopsy of the cervix in the presence of irregular bleeding. For these simple procedures, *there is no substitute*. By following this plan, the number of times one fails to find cancer of the cervix will be reduced.

* * *

Every cervical or uterine polyp must be considered malignant until proven benign.

* * *

The development of a general biochemical screening test for cancer will not change the essential need for the competent physician's examination to locate and treat the cancer indicated by the test.

* * *

The incidence of cancer in patients with chronic cystic mastitis is ten to twelve times greater than in those with normal breasts.

* * *

It is probably wise not to give estrogen in high dosage to women of or above forty years of age if they have a family history of breast cancer.

* * *

On physical examination of the breast, gentleness is the keynote in all approaches.

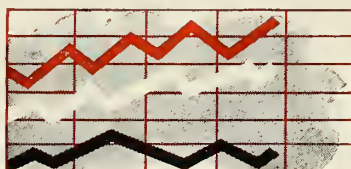
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Any breast mass in a mature woman calls for careful appraisal by the family physician.

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NEWS MEDICAL

MICHIGAN AUTHORS

Mathew Alpern, Ph.D. and J. Reimer Wolter, M.D., Ann Arbor, are the authors of an article entitled "The Relation of Horizontal Saccadic and V Vergence Movements," published in *A.M.A. Archives of Ophthalmology* for November, 1956.

Alfred Jay Bollet, B.S., M.D., is the author of an article entitled "Present Knowledge of Ground Substance and Its Relationship to the 'Collagen Diseases,'" published in the *Wayne State University College of Medicine Bulletin*, Volume 3, Number 3.

C. Paul Hodgkinson, M.D., Detroit, is the author of an article entitled "Hypofibrinogenemia and Obstetric Hemorrhage," published in the *Journal of the Arkansas Medical Society*, December, 1956. This paper was delivered at the eightieth annual session of the Arkansas Medical Society.

Vance Fentress, M.D., Paul Firmschild, M.D., and William S. Reveno, M.D., Detroit, are the authors of an article entitled "Perforated Duodenal Ulcer Complicating Prednisone Therapy," published in the *New England Journal of Medicine*, and condensed in the *American Practitioner and Digest of Treatment*, December, 1956.

Ivan B. Taylor, M.D. and Edward W. Crawford, M.D., Detroit, are the authors of an article entitled "Anesthetic Management of Patients in Poor Physical Condition," presented before the Thirtieth Congress of Anesthetists, and the annual meeting of the members of the International Anesthesia Research Society, Florida, April, 1956, and published in *Current Researches in Anesthesia and Analgesia*, November-December, 1956.

J. S. DeTar, M.D., Milan, is the author of an article entitled "The Generalist, the Hospital and the A.M.A.," presented at the Eighty-sixth Annual Session of the Colorado State Medical Society, September, 1956, and published in the *Rocky Mountain Medical Journal*, December, 1956.

Richard H. Meade, M.D., Grand Rapids, is the author of an article entitled "Some of the Forgotten Men in the Field of Thoracic Surgery," published in the *Journal of Thoracic Surgery*, August, 1956.

Richard H. Meade, M.D., Grand Rapids, is the author of an article entitled "The Story of the Development of Surgery for the Patent Ductus Arteriosus," published in *Surgery*, October, 1956.

* * *

The Academy of Medicine of Cincinnati cordially invites all physicians, their families, and their patients to its 100th Birthday Party, February 27 through March 5, 1957. In order to officially observe the occasion, a

Health Museum and Exposition will be established in Cincinnati's spacious and historic Music Hall. One hundred and seventy-five health and scientific exhibits, representing medicine, hospitals, research centers, public health, nursing, pharmacy and industry will be displayed in the north and south halls. Notable among these exhibits and occupying some 4,000 square feet of space, will be an atomic energy exhibit from the American Museum of Atomic Energy entitled "Atoms for Peace."

In the main foyer of the hall, "Juno," a full-sized, activated manikin, graciously loaned for the occasion by the Dominican Republic, will be on display. Juno is operated electrically, and with concurrent recorded narration, will demonstrate blood vessels, bones and organ structures of the body.

Dr. Paul D. White and Dr. Walter Alvarez, noted medical scientists and authors, have accepted invitations to be among the distinguished guest speakers.

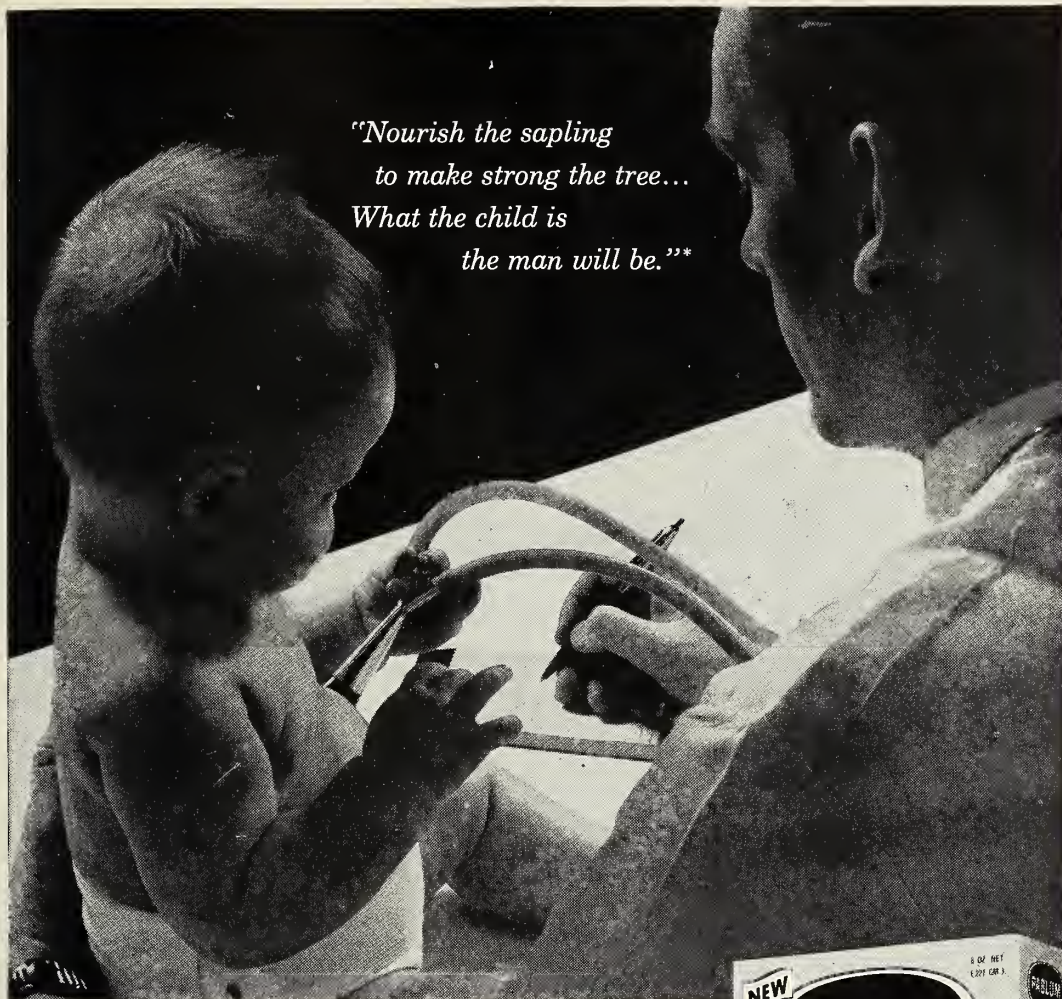
* * *



REHABILITATION INSTITUTE OF METROPOLITAN DETROIT
Courtesy of Albert Kahn Associated Architects and Engineers, Inc., Detroit, Michigan.

The formal ground-breaking ceremony for the Rehabilitation Institute of Greater Detroit took place on December 4, 1955, at Harper Hospital. Among the distinguished persons present was Senator Charles E. Potter, who was the guest speaker. The Senator expressed his sentiments: "This building symbolizes need which lies deep in the heart of each one of us: to be useful and to be recognized by our fellow human beings as useful. No one, I believe, recognizes the importance of this need more clearly than the President when he said this about our Vocational Rehabilitation Laws. 'It re-emphasizes a great value which we in America place upon the dignity and the worth of these individual human beings. It is a humanitarian investment of great importance.' And we in Detroit repeat those words for all the world to hear."

(Continued on Page 252)



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to make strong the tree...
What the child is
the man will be."**

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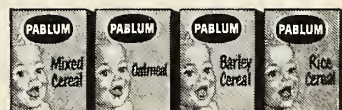
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1. Pollock, B. E., and Pruitt, F. W.: *Am. J. M. Sc.*, 226:172, 1953.

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(Continued from Page 250)

Carl V. Weller, M.D., Chairman of the Department of Pathology, University of Michigan, and Editor-in-chief, *American Journal of Pathology*, on retirement leave from the University, died December 19, 1956, in Ann Arbor.

* * *



LAWRENCE REYNOLDS, M.D.,
DETROIT RADIOLOGIST,
AWARDED GOLD MEDAL

Lawrence Reynolds, M.D., Radiologist and Chief of the Department of Radiology, Harper Hospital, Detroit, receives congratulations from Dr. Clarence R. Hufford (right), Toledo, Ohio, President of the Radiological Society of North America, following presentation of the Society's Gold Medal to Dr. Reynolds. Fellow Detroit radiological colleague, Howard P. Doub, M.D. (left) assists in bestowal of the coveted medal, awarded annually by the Society to outstanding members of the radiological specialty. Dr. Reynolds and Dr. Doub are both editors of the two leading scientific journals in radiology. *The Journal of Roentgenology*, *Radium Therapy and Nuclear Medicine*, is edited by Dr. Reynolds; the *Journal of Radiology* by Dr. Doub.

* * *

The Board of Regents of the University of Michigan on December 14 reported several grants for medical research, mostly in the Public Health Department. The National Advisory Council, Health Research Foundation of the Department of Health, Education and Welfare, announced the grant of three sums for construction and equipment of facilities at the University of Michigan. First was \$605,000 on a matching fund basis to provide additional facilities of about 33,000 square feet of new space for the School of Public Health.

The Kellogg Foundation the same day announced a similar matching grant to complete the construction. There will be 4,000 feet added to the Department of Environmental Health, 10,000 to the Department of Epidemiology, 2,000 to Public Health Statistics, 5,000 to the Department of Public Health Practice and 12,000

(Continued on Page 254)



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Any portion of the heart sounds may be permanently recorded upon paper-thin magnetic discs that may be filed with the patient's history or mailed to a consultant. They may be "played-back" (both heard and viewed) at any time for review, study or consultation.

The CAMBRIDGE "SIMPLI-SCRIBE" Model is a direct writing, portable electrocardiograph. When used in combination with the Audio-Visual Recorder, the electrocardiogram from the "Simpli-Scribe" may be viewed upon the cathode ray screen of the Recorder while listening to the heart sounds, or the electrocardiogram may be superimposed upon the heart sound trace for timing complex cases.

Now the Physician, Hospital or Clinic has available a pair of complementary instruments making possible more rapid, accurate and complete diagnosis of heart disease.

Send for Bulletin 185

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(Continued from Page 252)

to the Department of Research in Industrial Hygiene and Safety, including toxicology and industrial waste.

\$58,522 is provided to remodel the seventh floor of the research building, and \$600,000 for a new structure for research laboratories.

* * *

The Public Health Service in Washington, D. C., on Thursday, December 13, 1956, announced a grant of \$900,000 on a 50/50 matching basis to Wayne State University to help build a new eight-story addition to the present College of Medicine building for purposes of research. These grants are all part of a \$24,000,000 appropriation made by the last Congress.

* * *

Soviet Doctors.—An American correspondent in Moscow reports the Russians are increasing the number of doctors they now graduate 23,000 per year. The official count is 330,000, or one to every 600 people, and they believe there should be one for every hundred. The state pays for the education, provides meals in huge dormitories, even in vacation time; also helps in clothing and quarters for most of the students. Nearly ninety per cent of the doctors now are women, mostly the products of wartime training; however, in some of the medical institutes today women account for only 60 per cent.

Russian doctors are all government employees. Pay starts at 400 rubles a month (\$100) and for a director's position may be as high as 4800 rubles a month. Most doctors, in addition, get free housing and other items from the government.

* * *

Blue Cross is the subject of a new study. *United States Review* (November 24, 1956) reports the formation of a special subcommittee by the National Association of Life Underwriters. Its assignment will be to study the need for more effective regulation of Blue Cross-Blue Shield and similar plans by the insurance departments of the state.

* * *

The Air Force reports that since July 1, 1956, 191 of its officers have entered residencies in various specialties, all but twenty-six of them in civilian hospitals. The Air Force has need of more doctors in the specialties.

* * *

Surgeon-General Leroy Burney of the U. S. Public Health Service is making a fresh plea to all doctors to increase the use of poliomyelitis vaccine. Only four states used all their free allotment—Illinois, Kansas, North Dakota, and Vermont. The vaccine is now accumulating and is in sufficient supply to care for nearly all who may wish it.

* * *

Medical care costs up during third quarter of year. Over-all medical care costs for U. S. families rose 1.5 per cent during the third quarter of 1956, according to a U. S. Bureau of Labor Statistics study. But fees charged by physicians in the three-month period ending

(Continued on Page 256)

for normal, healthy, comfortable pregnancies



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(Continued from Page 254)

in September increased only 0.8 per cent. The overall cost of living increased 0.7 per cent. Medical care costs, when drug costs were excluded, increased 0.9 per cent. Other changes in the cost of living index included: general practitioners' fees, up 0.8 per cent; obstetrical care, up 1.7 per cent; prescriptions and drugs, up 0.7 per cent, and dentists fees, 0.16 per cent. Important factors in the rise in medical care costs were a 3.2 per cent increase in hospital rates and a 3.9 per cent rise in Blue Cross fees.

* * *

Councilor's Letter.—Over a period of years, a gradually developing change has taken place in the journalism business which I think deserves some serious consideration on the part of the medical profession. It brings to mind an old adage, time-worn but true, "a little knowledge is a dangerous thing."

The general public is not too well trained medically and cannot, therefore, interpret medical information correctly, but in recent years the public press has carried more and more stories of the results of medical research which have been immaturely released. These stories obviously, will do more harm than good. The lay press dramatically develops the information to a point allowing the public to assume that a miraculous cure has been developed, only to find later that the "balloon exploded." One good example was the immature publicity given the Salk vaccine. The Michigan State Medical Society

was severely criticized in the newspapers for attempting to block the release of the vaccine before it had been properly proven. Later facts justified our stand; ultimately the vaccine was made safe and has now been in use for some time.

Periodically, we are informed in the newspapers and magazines of new cures for cancer which were later found to be entirely ineffective. "Pills to replace insulin in diabetes" was given great publicity about a year ago. After from six to eight months of clinical trial, it can now be shown that very little benefit can be derived from these pills. Yet, the public was led to believe that the mouth treatment of the disease had already been discovered. We are all familiar with many other examples of this same bad publicity in the lay press.

In recent years much publicity has been given locally to the fact that certain patients had received heart and brain surgery with dramatic improvement. This bad publicity has gone so far that the patient's name is even printed in the press. We all know that heart and brain surgery of the types to which I am referring are still in the experimental stage, yet they give false hopes to many people.

In my opinion, this is very bad journalism and very poor ethics on the part of the physicians who see to it that the reporter gets the story.—William M. LeFevre, M.D., Councilor, 11th District. *Muskegon County Medical Society Bulletin*, December, 1956.

* * *

(Continued on Page 258)

Outguessing your "Second Guessers" ...always a serious problem in **OBESITY!**

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This New Dosage form of dextro amphetamine sulfate is not readily recognizable by the most astute patient!



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(Continued from Page 256)

The Air Force expects to award the first contract in December for construction of a new **Aero Medical Center**, an \$8.8 million project scheduled for completion at the end of 1958. The center will house the School of Aviation Medicine which is now being operated at Randolph Air Force Base in Texas and Gunter Air Force Base in Alabama. The new facility will be located at Brooks Air Force Base, San Antonio, Texas.

First construction contracts will provide for an academic building, flight medicine laboratory, research laboratory shops and supporting facilities. Contracts for an altitude building and research building will be awarded early in 1957.

The Air Force comments: "Establishment of this single aero medical center will allow the Air Force to conduct more extensive research into the medical aspects of supersonic flight problems, and to provide greater aviation medicine teaching facilities than are now available. Emphasis will be placed on developing means of protecting fliers at the high speeds and altitudes which are now encountered or expected to be in the future."

* * *

Selective Service plans to call up 450 physicians next February, 250 of them for the Army and 200 for the Air Force. This is the largest single call since the Army, Navy and Air Force took 1,275 men in March, 1955. The following month Congress started hearings

on the doctor draft extension bill. The act is scheduled to expire next July 1, and the Defense Department has indicated it would not ask for another extension. The draft call prior to the latest one was for 300 men in October. Other calls this year were 297 in February and 380 in July.

In announcing the call, Selective Service directed local boards to comb their files to make sure that younger Priority 3 physicians in residency training who have been deferred are really essential to the operation of hospitals. Some of these, said Selective Service, are not essential but are so classified. "It is hoped that there is yet time to get a sufficient number of younger men reclassified into class 1-A to satisfy these proposed calls without going into the upper age bracket," a memorandum to boards stated. By younger men, Selective Service means those under thirty-seven years of age.

Since the program went into effect in 1950 at the time of the Korean War, the special draft has brought 10,337 physicians into the services.

* * *

The Eighth Annual Discussional was held on the University campus at Ann Arbor, December 8, 1956. The medical directors of forty of the largest industrial organizations of the United States and Canada were present. It is conducted by the University's Institute of Industrial Health and the School of Public Health. The use of the tranquilizing drugs in industry brought

(Continued on Page 260)

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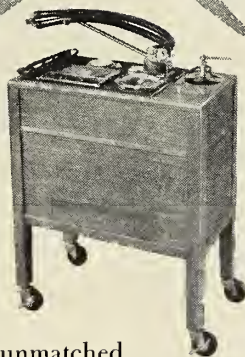


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(Continued from Page 258)

criticism, and is leading to extended research. What tranquillizers will do to initiative is of vast importance. **James G. Miller, M.D.**, Director of the Mental Health Research Institute, warns that about one American out of twenty has one of these drugs every month. They are even being dispensed by druggists without a prescription. **John H. Sheldon, M.D.**, Chief of Allergy, cautioned about indiscriminate use of penicillin and the danger of establishing sensitivity with consequent reactions and loss of time. He cautioned that aspirin also may cause allergic reactions. Hypertensive persons may experience dizzy spells as a result of control drugs and should not be responsible for operating machinery where other persons are involved, nor should they be permitted to work at jobs where extreme heat or physical labor tend to bring on dizziness, according to **Sibley Hoobler, M.D.**, head of the Hypertensive Unit.

The 40 medical directors attending the Discussional represented such firms as General Motors Corporation, Ford Motor Company, Chrysler Corporation, United States Steel Corporation, Lever Brothers Ltd. of Canada, Aluminum Company of America, Tennessee Valley Authority, United Mine Workers of America, Canadian Medical Institute, Wyandotte Chemical Company, Prudential Insurance Company, Standard Oil Company, and Inland Steel Company.

* * *

Ciba Citation.—The American Medical Association at its Tenth Annual Clinical Meeting in Seattle, Wash-

ington, cited CIBA Pharmaceutical Products, Inc., for service to the medical profession through its presentation of the national television series, **MEDICAL HORIZONS**.

* * *

The Sixth International Congress on Ophthalmology will be held in Washington, D. C., May 5 to 10, 1957.

The Pan-American Association of Ophthalmology will hold its Fourth Interim Session in New York in conjunction with the National Association for the Prevention of Blindness, April 7 to 10, 1957.

The American College of Surgeons will hold a sectional meeting in Toronto, March 25 to 27, 1957.

The International College of Surgeons, United States Section, will hold its Mid-Atlantic Division meeting February 10 to 13, 1957, at White Sulphur Springs, West Virginia.

* * *

A history of the Medical Society of the State of New York is now being prepared for publication. Several states have published such volumes—Michigan, Florida, Illinois.

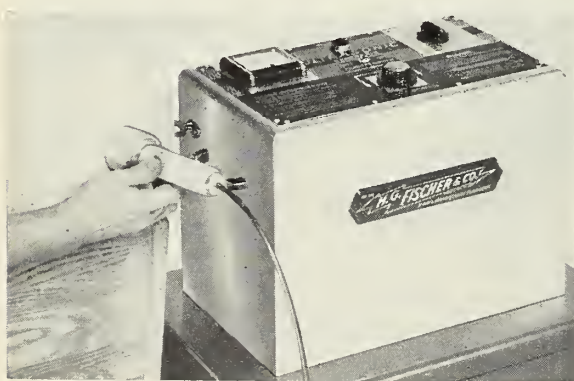
* * *

The National Foundation for Infantile Paralysis has announced another post doctoral training program with March 1, 1957, as the last day for registration. Those

(Continued on Page 262)

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(Continued from Page 260)

interested should contact their professional educational committee. Fellowships are available in rehabilitation, psychiatry, orthopedics, management of poliomyelitis, preventive medicine, research or academic medicine.

* * *

Roger W. Howell, M.D., has been appointed head of the Division of Preventive Psychiatry at the Lafayette Clinic. He will be responsible for investigating community resources in the school, public health and industrial areas for the prevention of emotional illnesses. He will integrate these investigations with, and teach and conduct research problems at the Lafayette Clinic and the Wayne State University College of Medicine. Dr. Howell was born and educated in Ann Arbor, Michigan. He was certified by the American Board of Neurology and Psychiatry in 1945.

* * *

Maternal Health.—The Council on Medical Service of the AMA has published in *The Journal of the American Medical Association* a six-part report of a very extensive study on maternal mortality, two sections of the report being devoted to research in Michigan. In the December 8, 1956, issue there were five pages detailing information developed through the Michigan State Medical Society's committee in co-operation with the State Department of Health and the Wayne County Committee. In the issue of December 29, 1956, much the same groups were represented in the study, but this time the work in Wayne County received the emphasis. This again was given five pages in the

J.A.M.A. These reports contain an enormous amount of very interesting material, and are well worth careful reading by all members interested in maternal health problems.

* * *



Tuberculosis case rates in Michigan point up the fact that the disease continues to be a problem in the heavily populated areas. Figures taken from the new edition of *Tuberculosis in Michigan* show that Wayne County with 37 per cent of Michigan's population concentrated in 1 per cent of the state's area reported 61 per cent

of all new TB cases in Michigan in 1955. All of Michigan's largest cities had higher rates than the counties in which they are located.

High case rates, however, were not limited to the population centers of the state. Alger with less than 10,000 residents had the highest county case rates. Baraga County ranked a close third behind Wayne. Luce County was fourth. But these three Northern Peninsula counties reported a combined total of forty-two new cases of tuberculosis in 1955, compared with Wayne's 3,375.

* * *

The Institute for Hospital Public Relations is being conducted by the Michigan Hospital Association, The University of Michigan, Michigan Hospital Service, and Blue Cross. It met in Ann Arbor, December 14, 1956, with forty-five administrators and public relations offi-

cials in attendance. John S. DeTar, M.D., immediate past president of the American Academy of General Practice, was a principal speaker. He stressed that the most important unsolved problem in interrelations between hospitals and doctors, is proper integration, with general practitioners being given better acceptance than has prevailed in the past.

* * *

On March 15, 1957, at the University of Louisiana auditorium there will be a **Symposium on Human Nutrition**, sponsored by the AMA Council on Foods and Nutrition. Speakers will include outstanding men in nutrition, biochemistry, pediatrics, heart disease and allied fields. No Michigan men are listed.

* * *

Approval of the two-year Residency Program in General Practice at the U. S. Army Hospital, Fort Knox, Kentucky, has been given by the Council on Medical Education, American Medical Association according to information received by the Education and Training Division, Office of the Surgeon General of the Army. This is the only residency program of general practice conducted by the Army Medical Service and has sixteen participants. The first year of the program is devoted to medicine and medical sub-specialties, including six months in pediatrics; the second, to surgery and surgical sub-specialties, including six months in gynecology and obstetrics.

* * *

The Fourth Interim Congress of the Pan-American Association of Ophthalmology will be held jointly with the annual meeting of the National Society for the Prevention of Blindness at the Hotel Statler, April 7-10, 1957. The program committee has arranged three most interesting symposia for Monday, Tuesday, and Wednesday mornings on fundus diseases, surgery, and therapeutics.

* * *

M. K. Newman, M.D., addressed the Eastern District of the Michigan Chapter of the American Physical Therapy Association on October 30, 1956, on the subject, "Medical Aspects in Geriatrics."

* * *

American Board of Obstetrics and Gynecology.—The next scheduled examinations (Part II), oral and clinical, for all candidates will be conducted at the Edgewater Beach Hotel, Chicago, Illinois, by the entire Board from May 16 through 25, 1957. Formal notice of the exact time of each candidate's examination will be sent him in advance of the examination dates.

Candidates who participated in the Part I examinations will be notified of their eligibility for the Part II examinations as soon as possible.

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The Third Annual Merrell Symposium on Constructive Medicine in Aging: Cardiovascular Disorders in the Aged, was held Thursday, January 17, 1957, at the Netherland Hilton Hotel, Cincinnati, Ohio. Johnson McGuire, M.D., Professor of Clinical Medicine and Director of the Cardiac Laboratory, University of Cincinnati College of Medicine, was moderator.

Reports were presented by the following: K. J. Franklin, The Medical College of St. Bartholomew's Hospital, London: "Investigation of What Is Considered Normal for the Aging Cardiovascular System"; J. Earle Estes, Jr., Mayo Clinic, Rochester, Minnesota: "Venous Disorders in Older People"; Walter S. Priest, Associate Professor of Medicine, Northwestern University School of Medicine, Chicago: "Anticipation and Management of Cardiac Decompensation"; Jessie Marmorstons, Professor of Experimental Medicine, University of Southern California, Los Angeles: "Hormonal Aspects of Myocardial Infarction in Female and Male Subjects"; Ancel Keys, Professor of Physiology and Director of Laboratory of Physiological Hygiene, University of Minnesota, Minneapolis: "Calories and Cholesterol"; Robert W. Wilkins, Professor of Medicine, Boston University School of Medicine, Boston: "Drug Therapy for Hypertensive Vascular Disease in Patients Past Midlife"; Robert A. Bruce, Associate Professor of Medicine, University of Washington School of Medicine, Seattle:

"Evaluation of Functional Capacity in Patients with Cardiovascular Disease"; and Edward J. Stieglitz, Consultant in Geriatrics, Veterans Administration and St. Elizabeth's Hospital, Washington, D. C.: "Integrated Unity of the Patient."

* * *

The Fourth International Poliomyelitis Conference will be held in Geneva, Switzerland, July 8-12, 1957, under the auspices of the International Poliomyelitis Congress. For information and reservation form, write the Secretariat of the Conference, Hotel du Rhone, Geneva, Switzerland.

* * *

"Grand Rounds"—the series of valuable closed-circuit telecasts for physicians, will be continued in 1957 by the Upjohn Company, sponsors. Thirty-three newly-developed large-screen projection television systems have been acquired. For copy of program and production dates, write J. C. Gauntlett, The Upjohn Company, Kalamazoo.

* * *

"Encourage your child to prepare for a career in the nuclear science fields," advised Lawrence R. Hafstad, Vice President in charge of the research staff of General Motors Corporation (and 1956 MSMS Biddle Lecturer). Dr. Hafstad urges parents of the youngster with a "scientific gleam in his eye" to help such a

child find an outlet in the atomic arena. For reprint of Dr. Hafstad's article "Should Your Child Be an Atomic Scientist?" write Dr. Hafstad at 51 Madison Avenue, New York 10, New York.

* * *

Eleventh Annual Symposium on Fundamental Cancer Research, sponsored by the University of Texas M.D. Anderson Hospital and Tumor Institute will be held at the Texas Medical Center, Houston, March 7-8-9, 1957. For a copy of program write Leon Emochowski, M.D., Anderson Hospital, Houston 25, Texas.

* * *

Harry J. Loynd, President of Parke, Davis & Company of Detroit, has announced selection of a site in Ann Arbor as location for the new PD \$10,000,000 Medical Research Center, after a survey of thirty sites in Michigan.

* * *

The American Trudeau Society will hold its 52nd Annual Meeting in Kansas City, March 6-9, 1957. For program write Edward J. Welch, Chairman, 1101 Beacon Street, Brookline 46, Massachusetts.

* * *

The Tercentenary of the death of William Harvey, discoverer of the circulation of the blood, will be commemorated by the holding of an International Congress on the Circulation from June 3-7, 1957, in the Royal College of Surgeons, London. For information and program write D. Geraint James, M.D., 11 Chandos Street, Cavendish Square, London, W.1, England.

* * *

The Sixth International Congress of Otolaryngology will be held at the Statler Hotel, Washington, D. C., May 5-10, 1957. For information and program write Paul H. Holinger, M.D., Secretary, 700 N. Michigan Avenue, Chicago 11.

* * *

Willard L. Quennell, M.D., former administrator of Highland Park General Hospital and subsequently associated with Veterans Administration, has been transferred to the VA Regional Office at Detroit.

* * *

The First Postgraduate American Assembly in Fertility and Sterility will be held at the New York Medical College-Metropolitan Medical Center, May 18-31, 1957. Information and program may be obtained from Ralph E. Snyder, M.D., Dean, 1249 Fifth Avenue, New York 29. Limited registration with \$150.00 tuition.

* * *

A statewide Gerontology Society was officially organized at a founders day luncheon and program at Kellogg Center, East Lansing, on December 8, 1956. Dr. Wilma Donahue, Ann Arbor, was elected the first Society President, with A. Hazen Price, M.D., Chairman of the MSMS Geriatrics Committee, as President-Elect. Frederick C. Swartz, M.D., Lansing, was named to the Society's first Board of Directors.

* * *

J. S. DeTar, M.D., Milan, President of the American Academy of General Practice, discussed "A Hospital Is Only as Good as Its Medical Staff" at the Institute for Hospital Public Relations sponsored by the Michigan Hospital Association in Ann Arbor, December 13.

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Tom D. Spies, M.D., Birmingham, Alabama, guest essayist on the 1956 MSMS Annual Session program, has been elected President-Elect of the Interstate Postgraduate Medical Association of North America. Congratulations, Dr. Spies!

* * *

The Midwest Institute of Alcohol Studies will be held at Western Michigan College at Kalamazoo on June 24-28. The Institute will aid those who wish to survey aspects of alcohol-related problems. Deadline for applications for scholarships is April 15. For full information write George Nimmo, 102 S. Walnut Street, Lansing.

* * *

MSMS Executive Director William J. Burns was a member of a panel "Stumping Experts" at the Blue Shield Professional Relations Conference, Drake Hotel, Chicago, February 11.

* * *

T. E. Schmidt, M.D., of Jackson is serving as a member of the Club Service Consultative Group of Rotary International. Dr. Schmidt is Past President of the Jackson County Medical Society and a member of the MSMS Emergency Medical Service Committee; he is also Past President of the Rotary Club of Jackson.

* * *

The American College of Allergists announces its Thirteenth Annual Congress and Graduate Instructional Course in Allergy, Palmer House, Chicago, March 17-22, 1957. For program write Orval R. Withers, M.D., 2049 Broadway, Boulder, Colorado.

BEAUMONT MEMORIAL CONTRIBUTIONS

The response of the MSMS membership to the November 30 appeal of the Beaumont Memorial Committee for additional contributions to wipe off the deficit of the Beaumont Memorial was instant and generous. To January 15, 1957, donors sent in checks totaling \$7,570, which liquidated all of the debt except \$1,530.

The Council and the Beaumont Memorial Committee extend sincere thanks to all MSMS members who came to the rescue of the Beaumont Memorial Restoration in such noble fashion.

The American Cancer Society is distributing nationally to all AMA members a thirty-two-page booklet titled "The Physician and the American Cancer Society." The brochure, with two-color cover, is generously illustrated. It details the ACS program of research and outlines services to patients, as well as its public and professional education programs. It gives a capsule history of the Society, its organizational philosophy, its guiding principles. Also provided is a listing of ACS publications and materials of special interest to doctors, and the addresses of the sixty ACS Divisions where they may be obtained.

"... I'm writing you in regard to one of the very best doctors in the world."

This is part of a letter written by Mrs. Bonnie Tykoski, Monroe, Michigan, to the American Medical Association in November, 1956.

Following a five-week stay at the Monroe Hospital recovering from critical injuries received in an automobile accident, Mrs. Tykoski wrote her note of appreciation.

"... I've been trying to think of some way in which I could let Dr. _____ know how very, very thankful I am. . . . All too often, the people through neglect, or just not thinking, don't give the doctors the proper credit due to them. . . . So I am writing to you . . . to let the AMA know of our personal opinion . . ."

The AMA reports that letters such as this now far outnumber the critical ones received in the Chicago office.

* * *

Michigan doctors who attended the AMA session in Seattle, November 28-29, 1956 included: H. Peter Brachman, M.D., Allegan; *George W. Slagle, M.D., and Wilfrid Haughey, M.D., Battle Creek; L. Fernald Foster, M.D., and *Orlen J. Johnson, M.D., Bay City; *John R. Rodger, M.D., Bellaire; Edward L. Quinn, M.D., Birmingham; William A. Maynard, M.D., Coleman; *Warren W. Babcock, M.D., *Wyman D. Barrett, M.D., J. Edward Berk, M.D., Melvin A. Block, M.D., *William Bromme, M.D., J. M. Colville, M.D., H. G. Kobrak, M.D., *Robert L. Novy, M.D., *Clarence I. Owen, M.D., *Grover C. Penberthy, M.D., F. P. Rhoades, M.D., John Sigler, M.D., William C. Strutz, M.D., and *Arch Walls, M.D., Detroit; Milton D. Comfort, M.D., Flat Rock; Sydney N. Little, M.D., and Franklin V. Wade, M.D., Flint; *William A. Hyland, M.D., and J. D. Vyn, M.D., Grand Rapids; *Willis H. Huron, Iron Mountain; Hilda A. Habenicht, M.D., and Jerome J. Van Gasse, M.D., Jackson; Reader J. Hubbell, M.D., Kalamazoo; Frederick Swartz, M.D., Lansing; Harold H. Gay, M.D., Midland; J. S. DeTar, M.D., Milan; A. Deane Hobbs, St. Louis; John T. Ferguson, M.D., Traverse City; and D. Bruce Wiley, M.D., Utica.

* * *

March of Medicine will repeat its hour-long documentary on missionary medicine, Tuesday, March 5, at 9:30 p.m., EST over the NBC-TV network.

This latest in the prize-winning TV series, produced and sponsored by Smith, Kline & French Laboratories in co-operation with the American Medical Association, is called "Monganga," tribal dialect for "White Doctor." Originally televised November 27, it brought a heavy flow of enthusiastic letters, telegrams, phone calls and personal messages—many asking to see the program again.

The show chronicles the daily labors of one missionary, John Ross, M.D., as an "illustration of the work American doctors are doing for sick people all over the world."

In Doctor Ross' clinic, surgery is always preceded by a prayer. He is shown at his fourteen-hour-day—overseeing a nearby leprosarium, conducting a weekly pre-

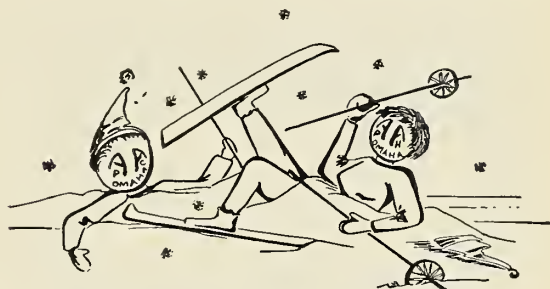


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Dec. 6	WKAR-TV, East Lansing	M.D. Placement	Film—"A Citizen Participates"
Dec. 9	WJBK-TV, Detroit	To Save Your Life	Film
Dec. 16	WJBK-TV, Detroit	Dental Health	Two Films—"Picture Your Teeth" and "Come Clean"
Dec. 20	WKAR-TV, East Lansing	To Save Your Life	Film
Dec. 23	WJBK-TV, Detroit	Rehabilitation	Film—"Man in the Window"
Dec. 30	WJBK-TV, Detroit	Secrets of the Heart	Film

natal clinic, traveling to distant "bush clinics." His days not only include the diagnosis and treatment of diseases which face all physicians everywhere, but also the very special challenge of tropical medicine. Leprosy, yaws, elephantiasis and sleeping sickness are encountered daily. Primitive living and sanitary conditions must be improved—and often Doctor Ross turns field construction engineer.

This dedicated man is a Kansan by birth who, as a minister, served congregations in California. At the age of thirty-six—after the death of his first four children, two of them within ten days—he decided to become a medical missionary. He graduated from the Indiana University School of Medicine and took graduate work at Tulane University. In 1950—by then he was forty-three years old—he was assigned to the Disciples of Christ mission in the village of Lotumbe.

March of Medicine was the first television series to receive an Albert Lasker Award for Medical Journal-

ism. In the past, the series has focused on such topics as mental health, cancer, heart disease, arthritis, and new surgical techniques.

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Acknowledgment of all books received will be made in this column, and this will be deemed by us as full compensation to those sending them. A selection will be made for review, as expedient.

METABOLISM, Clinical and Experimental. Volume V, Number 6. New York: Grune & Stratton.

LAKESIDE LECTURE SERIES, Volume I, 1956. Lectures I-V. Lakeside Laboratories, Inc., Milwaukee 1, Wisconsin.

BOOK OF HEALTH—An authoritative Family Guide. By W. W. Bauer, M.D., editor. Official American Medical Association book (an original, not a reprint). Printed by the Publicity Department of Dell Books, 200 Fifth Avenue, New York 10. First edition—35 cents per copy.

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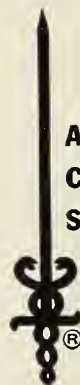
“*Pap*” smear test is simple, but women we have talked to find the word “smear” unpleasant and disturbing, and it may add to their anxieties about pelvic examinations.

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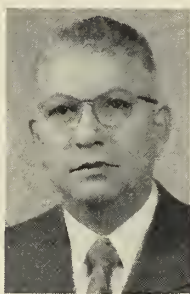
MARCH, 1957

NUMBER 3

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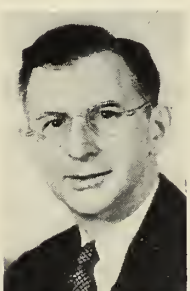
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U. S. COMMISSION ON AGING PROPOSED

Senator Potter of Michigan has introduced a bill (S258) to set up a U. S. Commission on Aging, ten members from the Senate and House, the executive branch and the public. It will study aged persons' problems employment, income maintenance, health and physical care, housing living arrangements and recreation. The commission's recommendations are to be made to Congress before July 1, 1958, at which time the commission automatically dissolves.

CARE FOR AGED COSTLY

"Unless more economical and effective methods are found and widely applied, the growing population of elderly persons and disabled people of all ages requiring prolonged (medical and hospital) care will continue to bankrupt themselves, and ultimately bankrupt many local governments and voluntary health insurance plans," Dr. LeRoy E. Burney, surgeon general of the U. S. Public Health Service, declared at the University of Michigan, on January 23, 1957, speaking to local health department officials at the first Institute on Public Health Administration conducted by the U-M School of Public Health and the Michigan Department of Health.

SCHERING AWARD CHEMOTHERAPY OF MENTAL ILLNESS

New areas of research opened up by the development of the tranquilizing drugs have had a marked impact on the interest of the doctors of tomorrow, according to Dr. R. Richard McCormick, Chairman of the Committee on the Schering Award.

The Schering Award is an annual competition among medical students in the United States and Canada, with prize-winning papers being given national recognition. The competition has been sponsored by Schering Corporation, pharmaceutical manufacturers of Bloomfield, N. J., annually since 1939. Dr. McCormick reported that medical students submitting papers for the pharmaceutical manufacturing firm's annual competition have shown a clear preference for the topic, "Recent Advances in the Biochemical Aspects and Treatment of Mental Disease." To date, the papers dealing with this subject are almost double those submitted on both cardiology and eye disorders, the other two subjects for the 1957 competition.

Dr. McCormick attributed the growing interest of medical students in this topic to the recent flood of publicity about tranquilizing agents, and about the problem of mental illness.

He announced that the deadline date for entry forms for the contest has been extended to March 15, 1957, but warned that all manuscripts must be submitted by June 30, 1957.

Cash awards have been doubled to \$4,500 this year, he added, bringing the first prize in each of the three categories to \$1,000, and the second prize in each to \$500. Other outstanding papers will be awarded professionally useful gifts.

The contest is open to all medical students in the United States and Canada. Information may be obtained by writing the Schering Award Committee, 60 Orange Street, Bloomfield, N. J.

DIABETES HISTORY

In 1947, through the efforts of Dr. Elliott P. Joslin, The Diabetic Fund was created. One of its functions was to supervise the awarding of the Quarter Century Victory Medal, to those diabetics who have been controlled on a diet and insulin for twenty-five years without developing any complications. The idea behind the creation was twofold, first, "to encourage diabetic patients to persevere in the careful control of their disease by proving through living examples that such control was worth while," and secondly, "to learn from those who earned the award the methods they had followed to attain it."

Up to September 1956 only sixty-eight such medals had been given out, including one to a diabetic in Ann Arbor. To meet the requirements the patient's condition must be excellent as shown by a complete physical examination. An accredited ophthalmologist must certify that the eyes are free from complications. X-rays of the

(Continued on Page 312)

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1. Locket, S.: Brit. M.J.
1:809 (Apr. 2) 1955.

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2. Wright, W.T., Jr., et al.: J. Kansas
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Heart Beats

THE RESEARCH PROGRAM OF THE AMERICAN HEART ASSOCIATION, ITS AFFILIATES AND CHAPTERS

CHARLES D. MARPLE, M.D., *Medical Director*

The necessity for expanding the scientific research effort of the nation is clearly evident and generally understood, but public recognition of this fact is of relatively recent origin.

Industry has provided much of the impetus to the twentieth century renaissance of research. No literate adult can fail to note the regular appearance in the press of advertisements by which industry solicits the services of men with scientific training and skills, and entices the youth of our country into scientific careers—for industry's sake. For the most part, these appeals have been made to recruit men in the physical sciences: engineering, physics and electronics. Recently, the pressing need for biological scientists has been emphasized, principally by educators and the scientists themselves. It is now obvious that what America needs most is not the traditional "good five-cent cigar," but more high-grade scientific manpower.

Since World War II, both Federal and private agencies have instituted programs of research support in a wide variety of scientific fields, physical, biological and sociological. While these programs have much in common, each has its own individuality. Several organizations, including the Life Insurance Medical Research Fund, the National Heart Institute of the National Institutes of Health, and the American Heart Association, are concerned primarily with the cardiovascular field.

The growth of the American Heart Association's program of research support has been dramatic. The first awards were made in 1948, and the first appointees began their work under Association auspices during the fiscal year, 1949-1950. In that year, there were twenty-four Research Fellows, two Established Investigators, and nineteen Grants-in-aid; no Career Investigators were appointed at that time. The total amount of money invested by the Association in research during the year was \$222,433.

Today, in the eighth year of the program, there are sixty Research Fellows, sixty-four Established Investigators, and 180 Grants-in-aid; in addition, three Career Investigators have been selected for lifelong support by the Association. The total sum invested in research during the year exceeds

\$1,850,000. The day when the staff could be personally familiar with the life story of each investigator—in effect, know "the name, number and batting average of each player," is now but a memory.

In numbers of individuals supported and in amounts of money spent, the research program of the Association is unquestionably successful. But what of its quality, which, in the final analysis, is the most vital consideration?

The research program of the American Heart Association rests upon two fundamental concepts: (1) that support should be given to individual investigators rather than to projects *per se*, and (2) that the research activities selected for support should cover a wide range of scientific disciplines, with emphasis on basic research.

Accordingly, through the Research Fellowship, the Association attempts to attract promising young scientists, provide them with an opportunity of obtaining training and experience, of developing the necessary knowledge and skills, and of acquiring the spirit of dedication which is essential to the maximum productivity in investigation. The Established Investigatorship goes a step further and gives the scientist an opportunity to establish himself as an independent worker. There is no waste in this program. The tyro who leaves research for academic medicine or for clinical practice is the better physician for his research experience. For the exceptional individual, there is the possibility of lifelong support as a Career Investigator, a unique opportunity which reflects the vision of the Association's early leadership.

No one can foretell where the next important scientific discovery will be made; no one can guess what esoteric research will lead to a practical cardiovascular advance. What we do know is that basic studies in physiology, chemistry and physics produce fundamental knowledge from which come all practical medical developments. It is only by pursuing every possible hypothesis that significant discoveries are brought to fruition.

This attitude has permitted wide latitude in the types of investigation supported. Much of this work relates directly to arteriosclerosis, hyperten-

(Continued on Page 282)

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and
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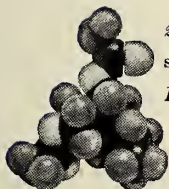
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RESEARCH PROGRAM

(Continued from Page 280)

sion, rheumatic fever and other specific cardiovascular conditions, but, on the other hand, many research projects are selected which can only be classified as basic physiology, chemistry and biology.

As the national program has grown, the increase in the number of applications submitted and in the total funds requested each year has kept pace with the increase in available funds. A certain loss of flexibility has ensued as a natural consequence of this growth. Of the many proposals made for introducing new forms of research support, only a few can be adopted. Artificial limitations are imposed by necessity, on the types of awards offered, on the sums awarded, and on the length of time for which awards are made.

Affiliates and Their Chapters

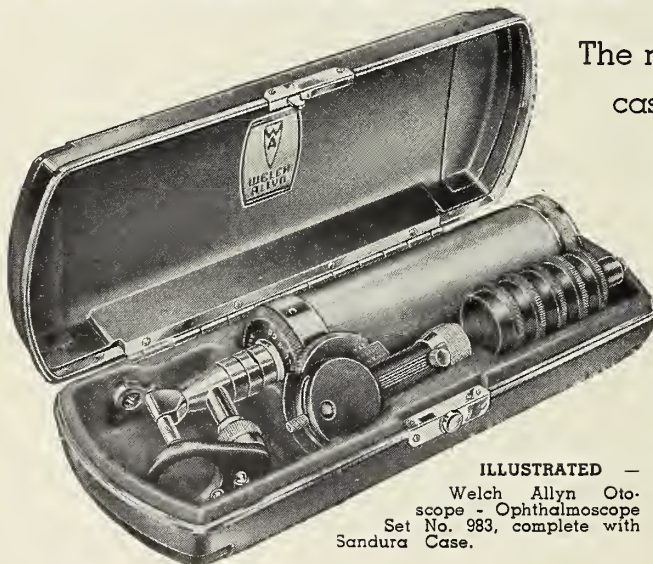
The growth of the affiliated heart associations and their chapters has provided an unexcelled opportunity for diversification of research support. Although these local heart associations are bound by the general research policies of the national organization, they are in most respects free to

spend their funds as they deem advisable. As funds for research have increased on the local level, from a nation-wide total of \$477,500 in 1949 to more than \$2,900,000 in 1956, heart associations have been enabled to support research in more effective ways. They have instituted forms of research support hitherto not offered by the national agencies, e.g., chairs of cardiovascular teaching and research, student fellowships, block and fluid grants, and so forth.

Here, then, is a highly imaginative and practically unrestricted research program which has utilized national and local resources to support a broad spectrum of scientific research in a variety of ways, designed in many instances to fit a particular need. As more funds are collected, additional investigators and projects can be supported and additional types of assistance can be offered to meet the demands of the everchanging research picture. An evaluation of these programs will demonstrate eventually the merit in each individual approach.

The essential point, however, is that a program of research support, like any other scientific endeavor, requires vision, imagination, specialized knowledge and good judgment. It is necessarily experimental, but in creating new frontiers of knowledge, there is a high degree of promise and satisfaction.

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—for these clinically important infections: tonsillitis; pharyngitis; pneumonia; otitis media; cervical lymphadenitis; streptococcal sore throat; infected tooth sockets; Vincent's infection; acne and superficial skin infections; impetigo; boils, furuncles and carbuncles; lung abscess; bronchitis; mastitis; osteomyelitis; wound infections; postoperative wound infections and infected lacerations; staphylococcal enteritis, staphylococcal diarrhea of the newborn; peritonitis (caused by susceptible organisms); pelvic inflammatory disease; gonorrhea; gonococcal arthritis; urethritis; scarlet fever; erysipelas.

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AMA Washington Letter

THE MONTH IN WASHINGTON

With Congress now well along in its session, the list of health and medical bills totals several hundred. Some are minor—and few persons will be affected regardless what happens. Others just don't make much sense—and the committees, regardless of politics, can be trusted to let these measures die a peaceful death.

But there are scores of others—all important bills—that have some chance of passage, their prospects ranging from an outside possibility to a strong probability. At this stage they can be regarded as the raw material out of which will come the studies, the debates and the arguments in the months ahead.

One of the major health-medical issues is federal aid to medical, dental and osteopathy schools. On this the administration wants grants for construction and equipment only; some of the Democrats want to include money for operating expenses as well.

In number of bills introduced, the general subject of problems of the aging probably tops the list. And that is no surprise. For several years welfare workers, housing experts and recreational leaders, as well as physicians, have been looking for ways to help the retirement age population. Recently a special center was set up within the Institutes of Health to devote its time exclusively to the aged. Outside government, voluntary groups have also been at work on the same subject.

Now the ideas developed by the years of discussion are coming to the surface in the form of legislation. Several of the bills would set up commissions, appointed either by the President or Congress. Another recommends that an existing House Committee make a study of the aging, similar to that suggested for the various commissions.

The commissions and committees would have one thing in common: They would further study and investigate in a field that many persons believe already has been plowed and re-plowed by investigators.

Several lawmakers want to get going right away. They would set up within the Department of Health, Education, and Welfare a new Bureau of Older Persons, which immediately would start out to solve some of the problems through grants, demonstrations and more research.

Most controversial of the "help the aged" bills is one originally proposed by the then Social Security Administrator, Oscar Ewing, in 1951. It

would allow 60 days a year of government-paid hospitalization every year for persons covered by OASI after they reach age 65. They could have this free service whether or not they were on retirement.

As in most Congresses, those who want to give the veterans more benefits and those who think they are getting too much already are coming to grips over new bills. Important in this group is a measure proposed by Chairman Teague (D. Texas) of the House Veterans Affairs Committee that would tighten up procedures under which veterans with non-service-connected conditions receive hospitalization. But at the same time there is pressure from other quarters for a lengthening of the "presumptive periods" for various diseases. Where the law now states that a certain disease or condition will be considered service-connected if diagnosed within one year after the veteran's discharge, these bills would make the period two or three years.

Many other bills aimed at liberalizing veterans' benefits in various ways also are awaiting committee action.

Social security and taxes are other popular fields for the legislators. As expected, several bills call for lowering the age at which a disabled person can start receiving his social security pension now set at 50. Many measures would change the income tax laws to allow more credit for medical expenses, and one proposes allowing the taxpayer to deduct premiums for health insurance from his income tax itself.

Of major interest to physicians and most self-employed is the Jenkins-Keogh legislation, which would allow deferment of taxes on a portion of income put into retirement plans.

Again, a number of lawmakers want the federal government to take a more active part in control of narcotics, barbiturates and amphetamines and treatment of addicts. One suggestion is to consider any shipment of barbiturates or amphetamines as a part of interstate commerce, on the theory that intrastate control is essential to interstate control. This and other bills also call for strict record-keeping and registration (physicians excepted from these provisions).

A plan introduced in the last session and offered again would give the President the right to assume control over the production distribution and use of any drugs or biologicals "for use in the prevention and treatment of disease."

Other medical bills will of course be introduced as the session moves on; those discussed here are already assured of considerable attention.

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PR REPORT

NEW FILMS ADDED TO MSMS FILM LIBRARY

Doctors who anticipate giving court testimony on a traffic accident or other personal injury cases will be relieved to know that the MSMS Film Library has three new films that will help them prepare for their coming ordeal. Truly, ALL doctors will find these films valuable. In fact, they are highly recommended for showing at county medical society meetings.

Medical Witness is the first of new AMA series on doctor-lawyer relations, having been produced in co-operation with the American Bar Association. The film depicts right and wrong methods of presenting medical testimony by re-enacting the trial of a personal injury case. *Medical Witness* is a 30-minute, black and white, 16 mm. sound film.

On Impact, a behind-the-scenes documentary film, shows an entirely new approach to automobile safety that can save a half-million persons annually from highway injuries. Included are scenes of actual automobile test crashes staged to test new safety developments. The 14-minute, black and white sound film was produced for the AMA by the Ford Motor Company.

The Case of the Doubting Doctor is a dramatic film which gets right to the heart of some of the misunderstandings about medical societies — yet brings home positively the tremendous values of medical organizations from the county society right on to the national level. Produced by the AMA, the 30-minute color sound motion picture is designed to stimulate greater member participation, create a better informed membership and enhance appreciation of society services.

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Need a vacation? Want some temporary help in your office during the summer resort rush? Or would you just like a breather from a heavy patient load? Maybe a Locum Tenens is the answer.

The M.D. Placement Service of the Michigan Health Council maintains a list of young doctors of medicine who are seeking temporary positions. Some of these M.D.s want openings right now. Others will be ready this summer. And the time they can spend as a Locum Tenens ranges from six weeks to a year.

A letter or telephone call to the Michigan Health Council, M.D. Placement Service, 706 North Washington Avenue, Lansing 6, Michigan, will put you in touch with the practitioner you might need to give you a hand for a short time.

So take advantage of this free service if you need assistance on a temporary basis.

Rather than wait until the last minute to find a Locum Tenens, however, the M.D. Placement Service recommends this procedure. As soon as you know the approximate dates you might need short-term help in your practice, list your opening with the Service. This allows plenty of time for making the necessary arrangements with an M.D. seeking such a position as you offer.

SPEAKERS ON PLASTIC SURGERY

County medical societies may arrange for scientific speakers on the subject of plastic surgery by contacting the Michigan Academy of Plastic Surgeons, according to an announcement by Robert J. Meade, M.D., Lansing, Secretary of the newly formed organization.

Doctor Meade said that members had offered to speak to medical societies and other groups in an effort to relate new developments in plastic surgery to practicing doctors of medicine. The Academy asks that requests be made eight weeks in advance if possible. Write Robert J. Meade, M.D., Secretary, Michigan Academy of Plastic Surgeons, 1023 East Michigan, Lansing 12, Michigan.

IT'S STEADY WORK BUT NOT MUCH ELSE

With eight years of socialized medicine experience, some 40,000 British doctors are talking of going on what amounts to a strike. Their incomes have been frozen since 1951, and they want a 2 per cent pay boost to keep them abreast of Britain's inflated living costs.

This state of affairs presents the best argument against socialized medicine we've encountered. With the individual's personal ability of small account, and with no incentive to be superior, we can't see much future for British medicine's ability to attract men who are mediocre.

And it's highly alarming to think of the situation and the hurt having to put their faith in practitioners who went into medicine because it offered steady work (even if the pay is poor) and a white collar. In light of what's happened to Britain's 40,000 unhappy doctors, that appears to be about the most that can be said for the profession under socialized medicine.

We can't imagine that many people would be happy over calling in a doctor who assessed his profession that way.—*Detroit Free Press*, Wednesday, January 16, 1957.

EFFECTIVE in respiratory infections including the 25% due to resistant staphylococci.^{1,3}

EFFECTIVE in dermatologic and mixed tissue infections including the 22% resistant to one or more antibiotics.^{3,6}

EFFECTIVE in genitourinary infections including the 61% resistant to other antibiotic therapy.^{2,5}

EFFECTIVE in diverse infections including the 21% due to resistant pathogens.^{1,5}

EFFECTIVE in tropical infections including those complicated by heavy bacterial contamination or multiple parasitisms.⁷

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AMA News Notes

AMA SPONSORS DOCTOR-LAWYER MEETINGS

More than 300 doctors and lawyers in Atlanta, Denver and Philadelphia will get together this month (March) at the invitation of the American Medical Association to discuss mutual problems of the two professions. The day-and-a-half meetings have been scheduled as a follow-up to three similar sessions held in other cities in the fall of 1955. Dates and locations for the Friday and Saturday symposiums are: March 15-16 at the Atlanta-Biltmore Hotel, Atlanta; March 22-23 at the Cosmopolitan Hotel, Denver, and March 29-30 at the Benjamin Franklin Hotel, Philadelphia.

Topics to be discussed include trauma and disease, medical expert testimony and the medical witness. On Friday afternoon, Dr. Herman A. Heise of Milwaukee will speak on the use and background of scientific tests for intoxication to be followed by a mock trial demonstration. Participants in the mock trial include AMA staff personnel and Lt. Robert Borkenstein, inventor of the testing device known as "Breathalyzer."

On Saturday morning, a doctor-lawyer panel will discuss trauma and cancer followed by a question and answer period. After luncheon, Irving Goldstein, a Chicago attorney, author of "Trial Technique, Medical Trial Technique" and editor of *Medical Trial Technique Quarterly*, will speak on the medical witness and expert medical testimony. Winding up the program will be a showing of the movie, "The Medical Witness," and a question period.

American Medical Association and American Bar Association representatives will be at each meeting. AMA spokesmen in Atlanta and Philadelphia will be Dr. David B. Allman, president-elect, and in Denver, Dr. George F. Lull, secretary-general manager. ABA representatives include—in Philadelphia, David Maxwell, president; Atlanta, E. Smythe Gambrell, immediate past president, and Denver, Thomas M. Burgess, member, board of governors.

Registration fee for each symposium will be \$5.00 to cover the cost of the luncheon and any published proceedings. Advance registrations should be sent immediately to the AMA Law Department.

NEW SLIDEFILM PINPOINTS QUACK DEVICES

More than a dozen mechanical quack devices and gadgets play the villain in a color slidefilm with sound just released by the AMA Bureau of Investigation. The 15-minute filmstrip, "Mechanical Quackery," is supplemented by narrative description of the devices and the fraudulent uses to which they have been put. It is available—on loan—to medical societies, service and fraternal groups and schools.

Oliver Field, Bureau director, describes the film as a public education experiment. "The slidefilm is a flexible and effective medium to use in exposing some of the

quacks to the public," he said. "It may be used by medical societies or individual doctors as a tool in a concerted program to fight quackery. It is valuable, too, when used by lay or professional groups to alert their members or the community to the harm caused by quacks who use these worthless machines and devices as cure-alls."

Twenty-five sets of the film and record are in the Bureau of Investigation's lending library. Requests should be addressed to the Bureau. (Note: Equipment needed to show "Mechanical Quackery:" A sound slidefilm projector—or a filmstrip projector with a 33 $\frac{1}{3}$ RPM turntable. Strip has 60 frames. Record is 12-inch.)

NEW MEDICOLEGAL FILM

A new medicolegal film on professional liability will be premiered Wednesday evening, June 5, during the AMA's Annual Meeting in New York City. This film, second in a series of six on various medicolegal problems, is being produced by the Wm. S. Merrill pharmaceutical company in cooperation with the American Medical Association and the American Bar Association. C. Joseph Stetler, director, AMA Law Department, reports a tremendous interest among both doctors and lawyers in the first film, "The Medical Witness," which was first shown at the 1956 Clinical Session in Seattle.

COLD WEATHER DAMAGES EXHIBIT

Even babies embedded in solid blocks of plastic have to be sheltered from the cold. Five of the twelve fetuses embedded in plastic blocks for the AMA exhibit, "Life Begins," were damaged recently by exposure to below freezing temperatures while enroute to Springfield, Illinois, for showings by the Illinois State Department of Public Health. Preservatives inside expanded, splitting the plastic blocks. The AMA Bureau of Exhibits reports that the five fetuses are being reset at the University of Illinois.

AREA MEDICAL SERVICE MEETINGS

A number of regional meetings have been scheduled this spring by committees of the AMA Council on Medical Service. Representatives of similar state committees will be invited to each session.

Committee on Maternal and Child Care.—March 30-31 in Philadelphia for the New England and Middle Atlantic states. Group will consider proposed guides for perinatal death studies similar to those prepared for maternal death studies.

Committee on Federal Medical Services.—March 16 in Reno, Nevada, for the Rocky Mountain and Pacific Coast states; April 6 in New York City for the New England and Middle Atlantic area. Principal discussion topic will be the AMA policy on care for veterans with

(Continued on Page 298)

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AREA MEDICAL SERVICE MEETINGS

(Continued from Page 292)

non-service-connected disabilities in Veterans Administration hospitals.

Committee on Aging.—April 27-28 in Dallas, Texas, for the Southwestern states. Over-all problems in the field of aging and the role of medicine and medical societies in meeting these problems will be discussed.

"MARCH OF MEDICINE" PROGRAM ON MISSIONARY MEDICINE REPEATED

Overwhelming response from physicians, churchmen, television writers and viewers has prompted March of Medicine to repeat its hour-long documentary on missionary medicine Tuesday, March 5, at 9:30 p.m. EST over the NBC-TV network. This latest in the prize-winning TV series, produced and sponsored by Smith, Kline and French Laboratories in cooperation with the American Medical Association, is called "Monganga," tribal dialect for "white doctor." Originally televised November 27, it brought a heavy flow of enthusiastic letters, telegrams, phone calls and personal messages—many asking to see the program again.

The show chronicles the daily labors of a medical missionary, Dr. John Ross, as an "illustration of the work American doctors are doing for sick people all over the world." Doctor Ross is shown at his 14-hour day—overseeing his clinic and a nearby leprosarium, conducting a weekly pre-natal clinic, traveling to distant "bush clinics."

"NOMENCLATURE" INSTITUTE IN INDIANAPOLIS

The American Medical Association recently announced that a short course on the use of the *Standard Nomenclature of Diseases and Operations* in the doctor's office, clinic or hospital will be held June 17-19 at the Indiana University Medical Center, Indianapolis. Two other "Institutes" have been scheduled in 1957: March 11-13 in Roanoke, Virginia, and August 5-7 in San Francisco. These three-day meetings are conducted by the AMA as a special service to medical record librarians and others using the *Nomenclature* in their work. Tuition is free. Applications should be sent to Mrs. Adaline C. Hayden, C.R.L., associate editor of the *Nomenclature*, at AMA Headquarters, Chicago.

FILM ON HEREDITY AVAILABLE

The basic story of heredity, sex determination, sex roles and attitudes within the framework of heredity and environment is dramatically told in a new color film which has recently been added to the AMA Film Library. The 18-minute sound film, "Human Heredity," was designed primarily for junior high students although older persons also will find it informative. One of the primary purposes of this 16mm film is to stimulate group discussion on this extremely important health subject. Medical societies may book the film through AMA's Council on Scientific Assembly Motion Pictures and Medical Television.

NEWSCOPIES

The American Medical Education Foundation wound up its fifth year of operation with a record total of \$1,072,717 in contributions for the country's 83 medical schools. This represents a 41 per cent increase over the previous year. . . . The Committee on Relationships Between Medicine and Allied Health Agencies—a committee of the AMA Board of Trustees—recently developed a brief statement designed to assist medical societies in this activity. Copies are available to physicians from the Council on Medical Service. . . . Limited supplies of the booklet, "Fitness of American Youth—A Report to the President of the U. S. on the Annapolis Conference," are available to physicians from the AMA Bureau of Health Education. This summarizes the findings and recommendations of the 149 national leaders in government, medicine, education, recreation, public health, sports, civic and youth programs who met last June to consider the problems of physical activity for young people. AMA representatives included Dr. Elmer Hess, immediate past president, and Dr. W. W. Bauer, director, Bureau of Health Education.

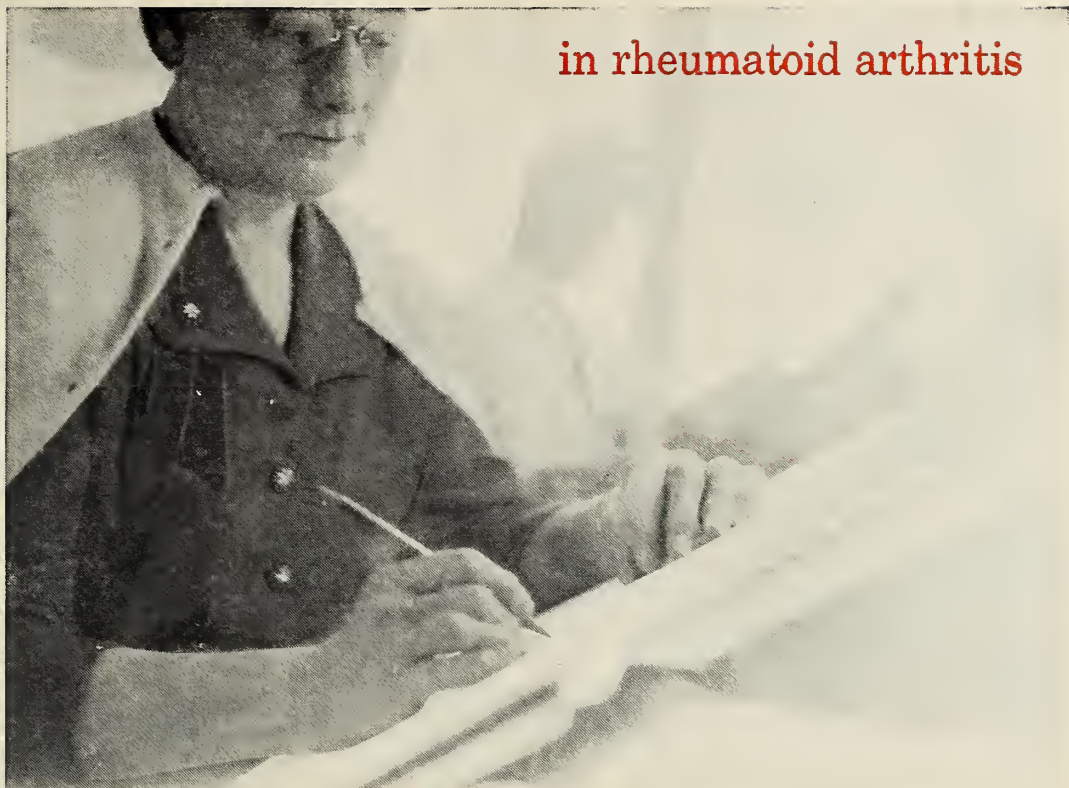
THE EARLY BIRD CATCHES THE WORM

The Sears-Roebuck Foundation announces that applications for financial assistance to physicians desiring to enter private practice are currently being processed for the first half of 1957. The deadline for receiving applications is April 1, with final determination on who will receive assistance no later than June 15. All applications are reviewed by a 17-member Medical Advisory Board who use as the sole criteria for loan evaluation the medical need of the community and the financial, need of the physician.

The Foundation makes an annual grant of \$125,000 to a revolving assistance fund for the purpose of making supplemental, 10 year, unsecured loans to physicians interested in establishing or improving facilities in suburban, rural or small town communities. These loans can be used for new building construction, remodeling, purchase of equipment, and for supplemental expenses connected with establishing a practice. The interest rate of these loans ranges from zero to six per cent depending on the rapidity of repayment.

This is an ideal time for graduating internes and residents who are interested in entering private practice but lack the necessary funds to apply since, if chosen, the funds will be available upon graduation in July. A Foundation spokesman urged all interested physicians to apply immediately and not wait for the April 1 deadline to insure proper processing of applications. Applications may be obtained from county or state medical societies, AMA's Council on Medical Service, or from the Sears-Roebuck Foundation, 3333 W. Arthington, Chicago, Illinois.

There is no single therapy which can be applied with universal success at any time in the development of bone cancer.



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DIABETES HISTORY

(Continued from Page 278)

complete body must be free from evidence of calcification in the arteries. The electrocardiogram must be normal.

The first such medal to be awarded in Western Michigan was given to Miss Janet Witteveen of Holland at the February 15 meeting of the Muskegon County Medical Society.

Miss Witteveen developed the usual symptoms of diabetes in January, 1930. She was examined by Dr. Wm. C. Kools of Holland who found sugar in the urine. He attempted control of the disease by diet alone but found it necessary to start insulin in November, 1930. In 1933, she was admitted to Presbyterian Hospital in Chicago under the late Dr. R. T. Woodyatt, who readjusted the insulin dosage. In 1940, she was under the care of Dr. Merrill Wells of Grand Rapids with the complaint of numerous insulin shocks. She was brought under better control at that time by a combination of P.Z.I. and unmodified insulin.

In March, 1954, at the age of thirty-six, she

again was experiencing numerous shocks alternating with spells of hyperglycemia. She had an enlarged thyroid, nervousness, palmar perspiration, and other hyperthyroid symptoms. An isotope tracer study indicated hyperactivity of the thyroid and a therapeutic dose of I^{131} resulted in marked diminution of these symptoms.

During her first year on insulin, she required from thirty to forty units daily. In 1940, she was controlled on 44 units, and at the present time is well controlled on N.P.H. alone, two doses totaling 23 units. She was used in the experimental study of "Orinase" for a time, which made no difference in the degree of control or insulin requirement.

In November, 1955, she completed twenty-five years on insulin. A complete physical examination, x-rays, electrocardiogram and a thorough eye examination were done and forwarded to the Advisory Committee in Boston. Word has just been received that she has been awarded the medal and it was presented to her officially on February 15, 1957.

WILLIAM M. LEFEVRE, M.D.
Councilor, 11th District

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Aspirin	200 mg. (3 grains)
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Caffeine	30 mg. (½ grain)
Demerol hydrochloride ...	30 mg. (½ grain)

Average Dose:

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Narcotic blank required.

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The JOURNAL

of the Michigan State Medical Society

ISSUED MONTHLY UNDER THE DIRECTION OF THE COUNCIL

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MARCH, 1957

NUMBER 3

Perinatal Mortality Study in Wayne County

January, 1953, to July, 1954

By Ruben Meyer, M.D.
C. Dale Barrett, M.D.
James T. Oliver
Detroit, Michigan

THE REALIZATION that neonatal mortality statistics have become fairly stable at levels of about 20 per 1,000 livebirths in the last ten years has stimulated a number of communities to organize surveys of the problem. In June, 1956, the Association of Maternal and Child Health Directors counted twenty-six states engaged in the study. The Wayne County Medical Society in collaboration with the Detroit and Michigan Departments of Health established its Perinatal Mortality Committee in 1952. A questionnaire type of report form was developed by a group of obstetricians, pediatricians, public health officers and pathologists. Approximately forty hospitals in Wayne County were asked to cooperate in completing a questionnaire for every stillbirth over 2,000 grams and all neonatal deaths. Nineteen agreed to do so.

Each cooperating hospital appointed a committee to review the reports, compiled by a resident or intern. The cause of death was to be verified and preventability assessed. These reports were then transmitted to the County Society Committee for further study. Ultimately all but nine hospitals discontinued this work. Preventability was too infrequently evaluated to analyze. No hospital reported one hundred per cent of eligible still-

births and neonatal deaths as revealed by a check against death certificates. The average was 70 per cent with a range from 20 per cent to 88 per cent.

TABLE I. SUMMARY OF PERINATAL DEATHS
ACCEPTED FOR ANALYSIS

Total Cases Studied		1,456
Cases Excluded—Stillbirths under 2,000 grams	87	
—No data	1	
Total Cases Accepted		1,368
Neonatal Deaths	943	
Stillbirths	425	

The pertinent maternal history, both medical and surgical, the history of the pregnancy, the labor and delivery, and the neonatal history were all to be covered in detail. The disease or condition leading directly to the infant's death as well as other antecedent causes and significant contributory conditions were reported with a reasonable degree of accuracy. However, at the time of statistical analysis, it became evident that there was frequent omission of other data, and numerous items had to be eliminated. Other items were loaded with nonpertinent information and also had to be discarded. For example, past medical history included tonsillectomy and nonrelated childhood diseases. This was a deficiency in editing by the central committee which must be corrected in future studies. Items regarding maternal anemia, abnormal vomiting, bleeding, and physiologic abnormalities were all inadequately recorded and specified.

Dr. Meyer is Chairman, Perinatal Mortality Committee, Wayne County Medical Society.

Dr. Barrett is Director of Maternal and Child Health, Detroit Department of Health.

Mr. Oliver is Biostatistician, Detroit Department of Health.

PERINATAL MORTALITY STUDY—MEYER ET AL

The number of cases studied as seen in Table I totaled 1,456, of which eight-eight were excluded, leaving 1,368. There were 943 neonatal deaths and 425 stillbirths. It is not our intention to prove

There was good matching in all cause groups listed in Table II except "maternal chronic disease" and "other." It is possible that the heavy weighting of the study group by Herman Kiefer Hospital

TABLE II. COMPARISON OF STILLBIRTHS ACCEPTED FOR STUDY WITH TOTAL STILLBIRTHS OCCURRING IN DETROIT DURING 1954-1955—CAUSES OF STILLBIRTH. (EXCLUDING ALL STILLBIRTHS UNDER 2,000 GRAMS)

Causes of Stillbirth	Detroit, 1954-1955		Perinatal Death Study	
	Number	% of Total	Number	% of Total
Maternal diabetes	37	2.4	21	5.0**
Other chronic disease in the mother	19	1.2	7	1.6
Acute infection in mother	5	0.3	4	1.0
Toxemia	97	6.2	30	7.1
Ante- and intra-partum infection, etc.	10	0.6	6	1.4
CPD, dystocia, and malposition	95	6.1	22	5.2
Cord and placental conditions				
Cord	309	19.7	69	16.2
Placental conditions	301	19.3	86	20.2
Birth injuries	27	1.7	11	2.6
Congenital malformation	112	7.2	32	7.5
Asphyxia; immaturity; unknown	391	25.0	94	22.1
Erythroblastosis	87	5.6	34	8.0
Other	73	4.7	9	2.1*

*Significant at 5% level.

**Significant at 1% level.

A greater proportion of women having some chronic disease as a cause of stillbirth exists in the study group in the city stillbirth occurrence. This may be due to the large proportion of cases selected from Herman Kiefer Hospital. Many problem cases are referred to Herman Kiefer Hospital for obstetrical care and follow-up.

TABLE III. COMPARISON OF NEONATAL DEATHS ACCEPTED FOR STUDY WITH TOTAL NEONATAL DEATHS OCCURRING IN DETROIT DURING 1953-1955—CAUSES OF DEATH

Cause of Death	Detroit, 1953-1955		Perinatal Death Study	
	Number	% of Total	Number	% of Total
Congenital malformations—CNS	40	1.2	13	1.3
Congenital malformations—Circul. Syst.	135	4.2	37	3.9
Other congenital malformations	171	5.3	71	7.5**
Birth injuries	244	7.6	83	8.8
Postnatal asph. and atelectasis	890	27.5	328	34.8**
Infections of newborn and other infections	105	3.2	20	2.1
Hemolytic disease of newborn	120	3.7	17	1.8**
Immaturity	1451	44.8	342	36.4**
Other	80	2.5	32	3.4
Total	3236		943	

**Significant at the 1% level.

1. Greater proportion of congenital malformations in study group than for city.
2. Greater proportion of asphyxia and smaller proportion of immaturity as cause of death in study group than for city as a whole. This is due to greater care in certifying other than immaturity as a cause of neonatal death. Unfortunately, asphyxia and atelectasis is, in itself, as great a wastebasket cause as is immaturity. It is more descriptive of the mode of dying than a cause of death. This points out the need for establishing a new series of death cause classes pointing out abnormalities in delivery, pathology in the mother leading to abnormal gestation and delivery, etc.
3. A lower proportion of deaths due to erythroblastosis exists in the study group than in the deaths occurring in the city. This may be due to the heavy weighting of cases from Herman Kiefer Hospital, where the majority of the patients are drawn from the Negro race. The incidence of Rh negative individuals is extremely small in the Negro.

any particular thesis in the study of these cases, but simply to subject these two groups, neonatal deaths and stillbirth, to statistical analysis, in order to document certain characteristics of perinatal mortality in association with maternal conditions.

A comparison was made of occurrence rate by cause to total stillbirths between stillbirths reported as occurring in the city of Detroit in 1954 and 1955 and the Perinatal Mortality Study.

cases has unduly influenced this group. Complicated maternity cases from the low income groups are generally routed through Kiefer Hospital. Otherwise, the comparison shows that the study group is a fair sampling of all stillbirths occurring in Detroit.

Another matching test was made for birth weight distribution of stillbirths as shown in Table IV. The two groups do not appear to be well matched. Discrepancies exist in three out of the

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seven groups: 2,521 to 2,725 grams, 3,626 to 4,080 grams, and 4081 plus. There are a large number of stillbirths reported to the Bureau of Vital Statistics where weight is not stated. This

Table V shows better sampling as evidenced by birth weight distribution in neonatal deaths when the study group is compared with death certificates for the city at large. There is significant

TABLE IV. COMPARISON OF STILLBIRTHS ACCEPTED FOR STUDY WITH TOTAL STILLBIRTHS OCCURRING IN DETROIT DURING 1954-1955—
BIRTH WEIGHTS
(EXCLUDING ALL STILLBIRTHS UNDER 2,000 GRAMS)

	Birth Weights in Grams							Not Stated or Unknown
	2071-2300	2301-2520	2521-2725	2726-3175	3176-3625	3626-4080	4081+	
Detroit perinatal death study	8.2	9.4	10.1**	24.3	16.2	11.5**	11.3**	9.0
Detroit occurrence 1954, 1955	10.5	10.6	5.2	22.4	19.5	16.4	6.7	12.5

**Significant at 1% level

TABLE V. COMPARISON OF NEONATAL DEATHS ACCEPTED FOR STUDY WITH TOTAL NEONATAL DEATHS OCCURRING IN DETROIT DURING 1953-1955—
BIRTH WEIGHTS

	Birth Weights in Grams											Not Stated or Unknown
	Under 1390	1390-1615	1616-1840	1841-2070	2071-2300	2301-2520	2521-2725	2726-3175	3176-3625	3626-4080	4081+	
Detroit perinatal death study	53.3**	6.2	6.0	4.1	3.8	3.1	3.4	6.7	6.2	2.5	1.8	2.9**
Detroit occurrence 1954, 1955	43.1	5.9	5.3	3.9	3.7	3.6	2.4	7.3	6.2	2.7	1.7	14.2

**Significant at 1% level.

Many infants were not weighed at birth. Birth weight was estimated for study or obtained from autopsy report after birth certificates (from which weight data were transcribed to death certificates) were turned in to Registrar. The differences seen here, then, have no real meaning.

TABLE VI. COMPARISON OF CONDITIONS IN MOTHER AND INFANT FOR LIVEBORN INFANTS DYING IN THE NEONATAL PERIOD AND FOR STILLBORN INFANTS

	Maternal and Infant Pathology Present			
	Liveborn-Neonatal Death		Stillbirth	
	Number	Percent	Number	Percent
Total studied	943	100.0	425	100.0
Pelvic or abdominal surgery	182	19.3	83	19.5
Abnormal vomiting	109	11.6	32	7.5*
Bleeding	275	29.2	68	16.0**
Hypertension	74	7.9	60	14.1**
Albuminuria	67	7.1	56	13.2**
Infections	27	2.9	12	2.8
German measles or other virus	12	1.3	4	0.9
Medical or surgical complications	106	11.3	72	17.0
Anemia	94	10.0	49	11.5
Multiple pregnancy	126	13.4	11	2.6**
Premature rupture of the membrane	102	10.8	32	7.5
Analgesia	496	52.7	311	73.2**
Pituitrin	59	6.3	64	15.1**
Jaundice	43	4.6	4	0.9

A greater number of women having liveborn infants:

- 1—had a history of abnormal vomiting
- 2—had a history of bleeding during pregnancy
- 3—had a multiple pregnancy

*Significant at 5% level.

**Significant at 1% level.

Fewer women having liveborn infants:

- 1—had hypertension or albuminuria
- 2—received analgesia or pituitrin

is a deficiency in hospital reporting of stillbirths and points out the need for further education of delivery room personnel to weigh all stillbirths.

difference only in infants less than 1390 grams and weights not stated. The failure to weigh infants is greater in the city as a whole than in the

study group. This indicates that case reviews result in greater attention to detail in hospitals and are beneficial for that reason if for no other.

as they appear in stillbirth and neonatal death records. Table VI lists the number and percentage of each group which shows the condition

TABLE VII. CAUSE OF STILLBIRTH AND GRAVIDA (EXCLUDING GRAVIDA UNKNOWN OR NOT STATED)

Cause	Gravida											Total
	Median	1	2	3	4	5	6	7	8	9	10+	
Chronic disease in mother	4.38	6	2	3	2	4	4	2	1	1	3	28
Maternal toxemia	3.62	10	0	3	4	5	1	1	3	2	1	30
Dystocia and birth injury	1.92	11	6	5	2	6	0	1	0	1	0	32
Cord condition	2.14	22	11	7	11	7	2	2	1	0	4	67
Placental condition	2.35	21	17	13	16	9	3	2	1	1	1	84
Congenital malformation	1.83	9	9	7	5	0	1	0	0	1	0	32
Erythroblastosis	3.36	2	4	9	7	4	3	1	4	0	0	34
Immaturity and asphyxia	2.32	22	19	19	13	7	7	1	1	2	2	93
Other	3.33	5	1	3	3	3	2	0	0	0	2	19
Total	2.48	108	69	69	63	45	23	10	11	8	13	419
Percent	25.8	16.5	16.5	15.0	10.7	5.5	2.4	2.6	1.0	3.1		
Accumulated percent		42.3	58.8	73.8	84.5	90.0	92.4	95.0	96.9			

Women delivering stillbirths have a history of a greater number of pregnancies than women delivering liveborn infants who die during the neonatal period. Comparing gravidity and parity, a greater fetal loss per number of pregnancies is seen for the following causes of stillbirth:

Dystocia and birth injury
Cord conditions
Immaturity and asphyxia

TABLE VIII. CAUSE OF STILLBIRTH AND PARITY (EXCLUDING PARITY UNKNOWN OR NOT STATED)

Cause	Para												Total
	Median	0	1	2	3	4	5	6	7	8	9	10+	
Chronic disease in mother	3.08	5	5	3	1	6	3	1	1	2	1	0	28
Maternal toxemia	2.50	10	2	2	3	4	1	4	2	1	0	1	30
Dystocia and birth injury	0.33	16	3	5	2	4	1	1	0	1	0	0	33
Cord condition	0.88	19	17	7	10	7	1	2	1	1	0	2	67
Placental condition	1.26	23	15	17	16	8	3	0	1	1	0	0	84
Congenital malformation	0.68	9	11	7	2	2	0	0	1	0	0	0	32
Erythroblastosis	2.25	2	4	10	6	8	0	3	1	0	0	0	34
Immaturity and asphyxia	0.93	21	28	17	12	6	3	1	1	2	0	2	93
Other	2.20	5	2	2	5	2	1	0	0	0	2	0	19
Total	1.19	110	87	70	57	47	13	12	8	8	3	5	420
Percent		26.2	20.7	16.7	13.6	11.2	3.1	2.8	1.9	1.9	0.7	1.2	
Accumulated percent			46.9	63.6	77.2	88.4	91.5	94.3	96.2	98.1	98.8		

Women delivering stillbirths have a history of a greater number of previous deliveries than women delivering liveborn infants who die during the neonatal period.

TABLE IX. NEONATAL DEATH CAUSE AND GRAVIDA (EXCLUDING GRAVIDA UNKNOWN OR NOT STATED)

Cause	Gravida											Total
	Median	1	2	3	4	5	6	7	8	9	10+	
Congenital malformation	1.94	27	34	27	17	6	3	1	2	0	0	117
Birth injury	1.64	28	21	11	5	8	3	4	1	0	1	82
Asphyxia	2.13	71	82	61	45	21	16	4	10	4	7	321
Infection	1.80	6	5	2	2	0	0	2	0	0	2	19
Hemolytic disease of newborn	3.50	3	2	3	2	2	3	1	1	0	0	17
Immaturity	2.11	87	75	70	42	28	18	8	4	4	3	339
Other	1.67	10	9	3	5	1	1	1	1	0	0	31
Total	2.01	232	230	176	118	67	44	21	19	8	13	928
Percent		25.0	24.8	18.9	12.7	7.2	4.7	2.3	2.1	0.9	1.4	
Accumulated percent		49.8	68.7	81.4	88.6	93.3	95.6	97.7	98.6			

Comparing gravidity and parity, a greater fetal loss per number of pregnancies is seen for the following causes of death:

Asphyxia
Immaturity

The table shows that the study cases represent a fair sample of the universe of neonatal deaths in the city of Detroit.

A comparison was made of maternal conditions

under study. It appears that a greater number of women having liveborn infants had a history of abnormal vomiting, bleeding during pregnancy and multiple pregnancies. We have no interpre-

tation for the abnormal vomiting and bleeding, but it is not difficult to see that the product of multiple pregnancies, while often low in weight,

dystocia and birth injury stillbirths indicates that women delivering stillbirths due to that cause had a history of greater fetal loss than mothers of other

TABLE X. NEONATAL DEATH CAUSE AND PARITY (EXCLUDING PARITY UNKNOWN OR NOT STATED)

Cause	Para												Total
	Median	0	1	2	3	4	5	6	7	8	9	10+	
Congenital malformation	0.99	18	42	32	11	9	1	3	1	1	0	0	118
Birth injury	0.70	26	22	16	5	6	4	3	0	0	0	0	82
Asphyxia	0.76	91	92	52	35	23	10	11	4	0	0	2	320
Infection	0.75	7	4	3	2	0	2	0	0	0	0	1	19
Hemolytic disease of newborn	2.5	2	3	3	2	3	3	1	0	0	0	0	17
Immaturity	0.71	110	83	72	30	17	15	2	5	1	2	0	337
Other	0.64	9	11	4	5	0	0	1	1	0	0	0	31
Total	0.78	263	257	182	90	58	35	21	11	2	2	3	924
Percent		28.4	27.8	19.7	9.8	6.3	3.8	2.3	1.2	0.2	0.2	0.3	
Accumulated percent			56.2	75.9	85.7	92.0	95.8	98.1	99.3	99.5	99.7		

TABLE XI. HISTORY OF PREVIOUS ABORTIONS, IMMATURES, OR OTHER ABNORMAL PREGNANCIES FOR WOMEN DELIVERING STILLBORN AND LIVEBORN INFANTS AS PERCENT OF TOTAL CASES*

	Previous Abortions							Total
	None	1	2	3	4	5	6+	
Stillborn	75.3	17.7	3.9	1.9	1.0	0.2	0.0	413
Liveborn-neonatal death	86.0	11.1	1.8	1.1	0.0	0.0	0.0	280

The two groups differ significantly. Women delivering stillbirths have a history of a greater number of abortions.

	Previous Immatures							Total
	None	1	2	3	4	5	6+	
Stillborn	90.4	7.4	1.5	0.0	0.5	0.2	0.0	404
Liveborn-neonatal death	90.3	8.5	0.4	0.4	0.0	0.0	0.4	282

The two groups do not differ materially regarding number of previous immatures.

	Previous Other Abnormal Pregnancies							Total
	None	1	2	3	4	5	6+	
Stillborn	85.4	11.7	2.2	0.5	0.0	0.2		410
Liveborn-neonatal death	86.1	11.3	2.1	0.5				278

The two groups do not differ materially regarding number of previous abnormal pregnancies.

*Unknown or not recorded cases excluded; Liveborn 2,000 grams and under excluded, to match groups.

are quite apt to be born alive, albeit with a poor chance for survival.

Fewer women having liveborn infants had hypertension or albuminuria and fewer received analgesia or pituitrin. The possible effects of toxemic factors or depressing agents in producing stillbirth reveals itself here.

Tables VII through XI relate stillbirths to gravidity, parity and previous abnormal pregnancies. Women delivering stillbirths have a history of a greater number of pregnancies than those delivering livebirths who die in the neonatal period. The difference between parity and gravidity in the

stillbirths. Women delivering stillbirths have a history of a greater number of births than do those delivering liveborn infants dying during the neonatal period. In the neonatal death group the differences between parity and gravidity in the asphyxia and immaturity deaths indicates that women delivering infants who die of these causes had a history of greater fetal loss than mothers of infants dying of any other cause.

Table XII shows the incidence of various forms of anesthesia related to stillbirths and neonatal deaths. There was less pudendal usage in the stillbirth class than in the neonatal deaths. Here,

TABLE XII. ANESTHESIA USED FOR DELIVERY—
COMPARING STILLBIRTHS AND NEONATAL DEATHS

Anesthesia							
	Pudendal	Saddle	Spinal	Inhalation	Other	None	Total
Stillbirths							
—number	30	14	55	237	12	77	425
—percent	7.1**	3.3	12.9	55.8**	2.8	18.1**	
Neonatal Deaths							
—number	105	55	142	350	20	271	943
—percent	11.1	5.8	15.1	37.1	2.1	28.8	

**Significant at 1% Level

Fewer women delivering stillbirths had pudendal or no anesthesia.
More women delivering stillbirths had inhalation anesthesia.

especially, a group of controls of survivors would have been valuable to see if this is a trend in the direction of survival with this form of anesthesia. The opposite situation is seen under inhalation anesthesia, where there are more stillbirths under that class. With no anesthesia the apparent trend is similar to pudendal. A control group of survivors is necessary for verification of these differences.

Table XIII shows a comparison of analgesia and anesthesia in varying combinations between stillbirths and neonatal deaths. In order to minimize the effects of other factors, we eliminated infants or stillbirths who had conditions which might be considered incompatible with life such as congenital anomalies and erythroblastosis. To match the two groups we eliminated neonatal deaths under 2000 grams. We included only non-macerated stillbirths known to have been alive until shortly before birth. Also eliminated were those infants with serious maternal or birth complications such as toxemia, diabetes, cardiovascular disease, placental or cord problems, difficult labor, presentation or inertia.

Analgesia, both with and without anesthesia, shows a significant difference between the stillbirths and neonatal deaths. There is a greater usage of analgesia, proportionately, in the stillbirths than in the neonatal deaths. Here, too, a control group would have strengthened the validity of this observation.

Conclusions

1. A second Perinatal Mortality Study should be instituted with a new approach, using a check sheet report of the type devised by the North Carolina State Board of Health and other groups.

2. A research staff is needed with a substantial part of its time available for supervision, comple-

TABLE XIII. ANALGESIA AND ANESTHESIA USED
FOR DELIVERY. STUDY OF A SELECTED
GROUP OF CASES

	Stillbirths		Neonatal Deaths	
No Analgesia or Anesthesia	5	8.8%	32	19.9%
Analgesia alone	3	5.3%	3	0.9%
Analgesia—total	47**	82.5%	92	57.2%
—with barbiturates	7		25	
—without barbiturates	40	44**	67	89
Analgesia and Anesthesia		77.3%		55.4%
Analgesia and Inhalation	23		46	
Anesthesia				
Analgesia and Conduction	21		43	
Anesthesia				
Anesthesia Alone—Total	5	8.8%	37	23.0%
Anesthesia Alone—				
Inhalation	4		15	
Anesthesia Alone—				
Conduction	1		22	
Ether	27a	54.0%	54a	42.5%
No Ether	23	46.0%	73	57.5%
Total cases includedb in				
Anesthesia and				
Analgesia Study	57		161	

**Significant at 1% level

(a) One in each group was recorded as "ether analgesia"

(b) Infants or stillbirths were included in this phase of the study who:

1. Had no conditions which might be considered incompatible with life. These include congenital anomalies, erythroblastosis or who to match the stillbirths, were under 2,000 grams.
2. Were not macerated stillbirths and were known to have been alive until shortly before birth.
3. Did not have serious maternal or birth complications. Excluded were deaths occurring because of: a) Toxemia, diabetes, or CV disease; b) Placental or cord problem; c) Difficult labor presentation or inertia.

tion and editing, to produce reliable data. This staff should also be available to participating hospitals in organizing their programs. It should co-ordinate the efforts of the hospital committees with the Wayne County Medical Society Perinatal Mortality Committee. In order to resume this study in keeping with these recommendations, it will be necessary to provide a research grant for the purpose of financing the special staff needed to do the work. The nucleus of this staff might be composed of an obstetrician-pediatrician team; clerical, nursing and statistical services co-ordinated by an epidemiologist who would serve as the research director.

3. A random selection of surviving infants should be made to serve as a control against the perinatal deaths.

4. Regular review of all perinatal deaths in all hospitals in Wayne County should be established procedure for accreditation. Without any deliberate evaluation it is evident from this study that the examination of perinatal deaths resulted in more careful attention to certain details. The educational results should produce at least some beneficial effect on fetal and neonatal salvage.

5. An evaluation of factors of preventability should be part of future study.

(Continued on Page 330)

Review of Immunization Programs Recommended With Advent of Salk Vaccine

By James L. Wilson, M.D.
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IT is clear that immunization against poliomyelitis should now be routine and must be integrated with other immunization procedures. Now, therefore, is a good time to review our present habits of immunization in this part of the country, and to consider why we have arrived at our present generally accepted program.

Immunization is routine against diphtheria, whooping cough, tetanus, and smallpox in Michigan, and now poliomyelitis must be attacked. We may hope that in a few years other diseases can be prevented; for instance, measles.

Our present programs, like many other things in medicine, are a result of multiple compromises. In considering the acceptance of any immunizing agent, the factors to be weighed are the effectiveness of the immunizing agent balanced against the risk of the procedure, and all considered in balance with the risk of the disease itself. The risk of the disease itself may change over the years as is true to these common diseases which are being considered. The risk is influenced by the frequency of the disease and, of course, by the effectiveness of available treatment.

The timing of the procedure is first determined by the danger period in life of the disease considered, but our whole program is of course greatly influenced by matters of convenience and cost. There has been in the last decade a marked trend towards early immunization so that most routines are initiated in very young children, at two or three months of age or even earlier. This tendency has developed because of the convenience of immunizing small infants, the short memory of a three-month-old infant, the few reactions, but most importantly the desire to develop, early in life, protective antibody levels against whooping cough.

The first disease against which general immunization was successful was, of course, smallpox. Here in Michigan, and at this time, we can

consider that we are carrying out smallpox vaccination on an individual as a matter of general duty to the public. The risk of exposure to smallpox itself is almost negligible. The risk of serious complications from the vaccination is very small indeed, but even local reactions are a nuisance so that we can consider that a person living in Michigan at present is making some sacrifice for the good of general public health by having his infant or himself vaccinated. We realize, however, that if this procedure were dropped, we probably would be in trouble again in a very few years and no one questions the advisability of continuing smallpox vaccination. The age of vaccination becomes then surely a matter of convenience since the risk of exposure at any age is small. It is obvious that the risk of the vaccination procedure itself becomes somewhat less in the small infant than the child of two or three, since he is less likely to contaminate the vaccination wound with his fingers when he is an infant. He is more protected and there is less chance for secondary infection. Another argument for early immunization is that the infant is much more under our control; we have him in our hands, as it were, and early vaccination can be combined with vaccination for other diseases for which the urgency is somewhat greater. Most physicians, therefore, are combining the vaccination with the other immunizations and a convenient time is in the middle of the first year. Some physicians are recommending smallpox vaccination in the newborn period. It is true that almost every baby is then completely under control since he is in the hospital and vaccination can be recommended then with certainty that it is going to be accomplished. The disadvantage is worth considering. There probably are a greater number of failures of "takes" in the newborn period. There seems to be some lessening of ability to develop vaccinia and, of course, many physicians dislike complicating this very confused period of life with some other illness. However, it is clear that the decision as to when to vaccinate can be made on the

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basis of convenience rather than on immunological data.

It was early believed that a very young baby developed antibodies against pertussis very poorly, so in the early days of pertussis immunization the procedure was not initiated until the child was six, seven, or even eight months of age. In the case of pertussis this delayed immunization carried a very great disadvantage since the mortality from whooping cough is far greater in early infancy than it is later. It was a great step ahead when Sako* showed that a small baby could indeed make antibodies to pertussis, even though not as effectively. There was an immediate trend towards earlier immunization against pertussis to gain some protection as soon as possible against higher mortality in early infancy. This was very reasonable, even though the antibody level resulting might not be as great. Whether this should be initiated at one month, two months, or three months, is still a matter of opinion but that it should be early seems definitely accepted by everyone. It is interesting that soon after we began the early immunization against whooping cough for the advantage it gave us in the prevention of early and highly fatal disease in small infants, our antibiotics began to appear and the risk of whooping cough itself in early life became less if medical care was sought since our treatment became immediately more effective. Nevertheless, there seems no reason at all to return to the late date of immunization simply because we have these broad spectrum antibiotics.

About the time when the effectiveness of early initiation of whooping cough vaccination became evident the combinations of antigens such as whooping cough and diphtheria were shown to be effective. We feel, however, no urgency to immunize the small infant against diphtheria. Maternal antibodies are carried through the placenta and this passive immunity protects the baby pretty effectively for six months or so. However, the advantage of the combination of diphtheria toxoid and pertussis vaccine made it practical and sensible to give the diphtheria toxoid early simply because we needed to get pertussis immunity early.

Immunization against tetanus has almost always been a "free rider" in the pediatric age group. The risk of tetanus in infancy is practical-

ly negligible. We immunize our infants against tetanus not so much because of the risk from tetanus as that it can be done "for nothing" since it can be combined very effectively with diphtheria and whooping cough with some synergistic advantage and no added risk of reaction.

In our more sophisticated populations the advantage of immunization against tetanus is as much to prevent the later need for decision about giving horse serum with its risks in case of an accident as it is simply to prevent tetanus. Immunization against tetanus had never been proved by clinical data to be effective in infants or young children. However, the determination of antibody level showed, without any question, that immunization was theoretically effective. It remained for war experience in adults, however, to prove from a clinical point of view that tetanus immunization with the use of toxoid actually was effective, and no one questions the advisability of combining it, therefore, with the other agents in the now common triple vaccine, whooping cough and diphtheria, all at an early age as a matter of convenience rather than because the risks in these early months of life calls for such protection.

Now, the new agent, the Salk vaccine, comes in for consideration. There is no need in this note to attempt to summarize the results of the nationwide experiment which was necessary to determine the effectiveness of the Salk vaccine. We can accept it as being highly effective even though we are not yet quite certain as to how frequently booster shots have to be given. In the great experiment, the shortage of the material available made it practical to limit the immunization to the children in the age group where the greatest poliomyelitis incidence occurred, and where the children were available for controlled experiment, that is, in the first, second, and third grade children. After the vaccine was shown to be effective, there was still a great shortage of the vaccine which only recently has been relieved, so that immunization continued for some time to be restricted to the most susceptible age groups, excluding infants.

As with all immunization procedures, again the question arose as to the ability of a small infant to develop antibodies under the stimulus of an antigen. This was questioned in regard to poliomyelitis as it had been in regard to whooping cough and other diseases, but particularly because of the known passive immunity which the mother

*The Journal of the American Medical Association Vol. 127, No. 7, February 17, 1945, page 379.

transmitted to the baby, as in diphtheria, which protected the baby for a considerable extent, though not absolutely, for the first early months of life. The question was whether the passive immunity of early life might prevent the development of active immunity, and whether the small infant's capacity to develop antibodies was too immature anyway. It was a big step ahead therefore, when it became pretty evident that the presence of passive antibodies did not prevent the development of active antibodies, but this did not prove still that young babies could, in fact, develop antibodies. At this moment, only a few studies have been carried out on this point. The one from the Well Baby Clinic of the Michigan School of Public Health and Department of Pediatrics has seemed to us adequate, however, to establish the fact that a useful level of antibodies can be produced in this age group. It seems certain, at this writing, that immunization can be initiated at three or four months of age or even earlier without the antigen's being wasted.

Now, although the risk of poliomyelitis is very much less in small infants than in older children, the convenience of injecting a small infant versus an older child, again adds its weight to the argument for early immunization. The fact that the babies are being routinely brought by their mothers to physicians for such procedures, gives another reason for initiating the immunization then rather than waiting for the age group where the risk of poliomyelitis is greater.

There seems at present to be no reason for not giving the Salk vaccine at the same time we initiate the so-called triple vaccine injections. A question still at issue is whether the mixing of the Salk vaccine and the standard triple vaccine in the same syringe results in any less effectiveness of the two agents. The fact that the State furnishes free one material, and the other must be purchased, also may pose a small problem. It seems best to give the two products separately in two syringes until further data are available, though probably the mixture would be both safe and effective.

There has been much public discussion of the advantage of an oral vaccine against poliomyelitis. This procedure is indeed tempting to consider. It seems highly probable that such a vaccine can be developed and may be available in a few years,

and it appeals to us because the oral route is the way that nature itself produces natural immunizations, and because it could be given without the pain and the bother associated with a needle. However, the advantage of an oral vaccine, if available, over our injected vaccine may not be very great from a practical point of view if the vaccine can be combined with the present triple vaccine into a quadruple vaccine. Can such a package be made of the four vaccines? I think there is little doubt that it can be and that we can expect soon such product to be on the market, but possibly not approved for one or two years, though very active work is being carried on in this field. When this takes place, the advantage of an oral vaccine in infants will then become negligible since we have to give a "shot" anyway for the routine immunization against our other diseases, and the combination of the Salk vaccine, like that of tetanus, can be a "free rider" with the other necessary immunization procedures. But without waiting for an oral vaccine or a quadruple vaccine, and with the availability of an adequate supply of Salk vaccine, it seems desirable that immunization with the Salk vaccine in infancy should be immediately carried out as a routine. The administration of two shots at the same time is very convenient indeed. A small baby hardly begins to cry from his first shot before the second one is injected, and the total trauma to be remembered, therefore, seems to be actually about the same as if the product were mixed.

The timing of the procedure again seems to be a matter of convenience. The baby is brought to most physicians at two or three months of age for initiation of the triple vaccine. A very practical procedure, therefore, is to begin now to give two shots at three months (or if one prefers at two months), one of the triple vaccine, which is now traditional and free, and one of the Salk vaccine that must be purchased; on the fourth month of life, or one month after the first shot, to give again the triple vaccine; on the fifth month to give the third shot of the triple vaccine, as we now do, and the second shot of the Salk vaccine, and finally the third shot of the Salk vaccine with the routine booster shot of the triple vaccine at the end of the first year or some few months later. The reactions to Salk vaccine have been so small that the fear of a double reaction, therefore, seems no longer an adequate reason for wanting to give

the two shots at different times. The total amount of work involved for the physician is hardly increased. Since the total amount of work for the mother to bring her child to a physician for this procedure is not increased, she is likely, therefore, to adhere to the program.

The booster shot is now routine and is wisely based upon the fact that although immunization when it is started as early as three months, may result in somewhat less effective production of antibodies, that a booster shot will bring on a marked recall reaction and give us a total immunity far better than if we had started it later with only three injections. One must not consider the proposed program as necessarily to be rigidly followed because great variations of it might well be made without theoretical disadvantage.

There is some question whether the initiation of Salk vaccine immunization should ever be coincidental with a booster shot to other agents. *The Journal of Immunology** has published some data that would indicate that there may be a poor response to the first injection of one antigen if, at the same time there is being stimulated a recall reaction by a "booster shot" of some other antigen. In other words, a recall reaction to tetanus, pertussis, and diphtheria by a booster shot being given, let us say at fifteen months, might be a poor time to give the first shot of the Salk vaccine. This is another reason, therefore, to initiate them all simultaneously.

**The Journal of Immunology*—Volume 77, Number 3, September, 1956. Studies on Diphtheria-Pertussis-Tetanus Combined Immunization in Children. I. Heterologous Interference of Pertussis Agglutinin and Tetanus Antitoxin Response by Pre-existing Latent Diphtheria Immunity.

The infant immunization program has been carried out by pediatricians with such enormous success that the vast majority of people, taught to expect this program, are cooperating to have their infants so protected, but this interest in little babies does not seem to be carried on to the school age group. The lack of interest in maintaining protection of older children against diphtheria, for instance, has been emphasized recently by the increase of diphtheria cases in Detroit. It is rather disturbing that now that there is an abundance of Salk vaccine, the demand by the public for it has become less. We shall have to "sell" this protection to the people now, just as we have less dramatized procedures in the past. The problem of getting adults immunized, and older children who are already past the childhood age in which immunization procedures is associated in the public mind, is a very difficult one. The initiation of a Salk vaccine procedure in an infant, however, makes a very good time to suggest to young parents that they themselves could profit from this protection as the data year by year show more and more the increased age incidence of poliomyelitis.

The following is a suggested program to be followed now until a quadruple vaccine is available. It should be emphasized that theory would permit wide variations in any program and that practical considerations of convenience, cost, and of the public interest, play a bigger part of establishing the details than do immunization principles.

- 3rd month—triple vaccine and 1st Salk dose
- 4th month—triple vaccine
- 5th month—triple vaccine and 2nd Salk dose
- 15-18th month—triple vaccine and 3rd Salk dose

PERINATAL MORTALITY STUDY IN WAYNE COUNTY

(Continued from Page 326)

6. An "alerter" system might be efficiently used to investigate current perinatal mortality rates in hospitals where they deviate from the expected mean. This need not be so elaborate as the Chicago system.

7. The Association of Obstetricians and Gynecologists, the American Academy of Pediatrics and other interested organizations should meet

with representatives of the statistical division of the World Health Organization to revise the section of the international lists of Diseases and Causes of Death which pertain to perinatal mortality. In coding stillbirths, there is too much overlapping of asphyxia and immaturity. On the other hand, there is inadequate coding of maternal complications in neonatal deaths.

A Review of Pediatric Meningitis in a General Hospital Over a Ten-Year Period

By E. M. Eichhorn, M.D.
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OVER THE past two decades the outlook for the meningitis patient has changed from one of almost complete hopelessness to that of fairly good chance for complete cure. However, deaths and disabling complications from meningitis still occur, and the disease remains a sufficiently formidable emergency to warrant serious study for the purpose of improving our understanding of the disease and thereby utilize our diagnostic and therapeutic weapons to best advantage.

Of the many advances in clinical medicine during recent decades, none surpass antimicrobial therapy in usefulness to the practitioner of medicine in his efforts to control disease. Nowhere is the importance of antimicrobial agents more dramatically portrayed than in the therapy of meningitis. Now that most of the commonly used antimicrobials have been available for several years, it is possible to study the results of their use. The purpose of this study is to determine how effective their use has been in the past, and to find if previous experience offers information enabling us to utilize them more effectively.

The material for this study was provided by reviewing the case records of pediatric meningitis cases from 1945 through 1954 at Hurley Hospital. We feel that Hurley Hospital, a general hospital with an open staff, offers an excellent opportunity to examine the care of a serious infectious disease by a presumably average cross section of medical practitioners.

Over the ten-year-period there were 151 cases with thirty-four deaths, for a gross mortality rate of 22.5 per cent. When the statistics are examined for individual years (Fig. 1), it is found that there is a gradual increase in the number of cases, while the death rate follows a downward trend. The mortality for recent years approaches the 10 per cent rate which should be obtainable, according to recent articles.^{1,2}

Of the patients who survived their illness, sixteen (14 per cent) were noted to have definite neurologic residuals. These included mental retardation, paralysis, spasticity, convulsions, hydro-

cephalus and blindness. One can assume that not all residuals became fully documented on the

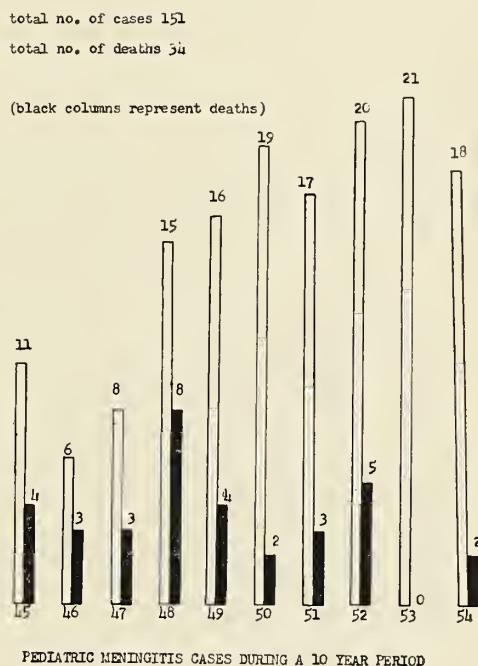


Fig. 1. Pediatric meningitis cases during a ten-year period.

charts. Subtle damage resulting in personality changes, behavior problems, mild retardation, and mild spasticity could easily be overlooked in an infant. In addition, there were twenty-two cases with periods of hospitalization over three weeks. Such prolonged courses would imply late control of the disease and a high incidence of residual brain damage.

Figure 2 demonstrates the age incidence and the death rate according to age. Of the nine infants less than one month old, eight died. Of the twenty-nine infants one to six months old, seven died. It is obvious that meningitis is primarily a disease of infancy and that mortality is higher in the very young.

Clinical Manifestations

To prevent mortality and to keep residual central nervous system damage at a minimum, early recognition is essential. In an effort to become

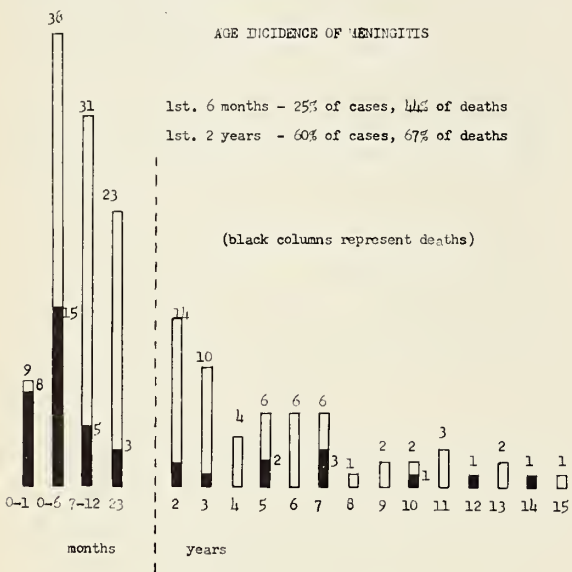


Fig. 2. Age incidence of meningitis.

familiar with the clinical findings seen most frequently, the observations on the patients reviewed were listed in Table I. This tabulation consists of the signs and symptoms noted on the 115 cases with an acceptable history and physical examination. All age groups were included. It is interesting that in twenty-six cases no mention was made of the presence of the findings usually associated with meningeal irritation. These cases were reported as having the findings shown in Table II. As might be expected, most of these patients were in the younger age groups, however; the oldest was twelve years old. It is noteworthy that ten of the twenty-six patients expired. Frequently, diagnosis was not suspected early and proper therapy was delayed.

It is only reasonable to assume that if those who examined these patients had been more familiar with the less well known manifestations of meningitis in infancy, the tabulation would have been higher for these findings. An excellent review article published recently¹ listed the more common findings seen in meningitis at different stages of infancy. These are presented in Table III.

In reviewing the clinical picture of meningitis, it is useful to remember that most cases are hema-

TABLE I. SYMPTOMS AND SIGNS OF MENINGITIS (FROM 115 CASES WITH ADEQUATE WORK-UP)

FEVER	85
STIFF NECK	77
VOMITING	70
DROWSINESS	49
RASH-PETECHIA	28
CONVULSIONS	26
STIFF BACK	23
UPPER RESPIRATORY INFECTION	21
HEADACHE	18
COMA	15
IRRITABLE	14
BULGING FONTANELLE	10
OCULAR SIGNS	7
NECK PAIN	7
KERNIG, BRUDZINSKI	4
LEG PAIN	3
BACK PAIN	2
ABDOMINAL PAIN	2

TABLE II. SIGNS AND SYMPTOMS IN 26 CASES WITHOUT MENINGEAL IRRITATION

FEVER	19
VOMITING	15
DROWSINESS	14
CONVULSIONS	7
BULGING FONTANELLE	6
RASH OR PETECHIA	6
COMA	4
UPPER RESPIRATORY INFECTION	4
IRRITABILITY	3
HEADACHE	2
OCULAR SIGNS	2

togenous in origin.³ If the septicemia can be recognized and treated before meningitis appears, the prognosis becomes much better. In septicemia, as well as in meningitis, clinical manifestations in the newborn and younger infant are not as striking as in older children, and valid information regarding these manifestations is valuable. Table IV contains manifestations listed in a report recently published.⁴ The authors reported that enteric organisms were found in 80 per cent of cases in recent years, with *Escherichia coli* the most frequently encountered organism.

Laboratory Diagnosis

Once meningitis (or septicemia in infants) is suspected, the spinal fluid should be examined as soon as possible. By personally examining spinal fluid stained with Methylene blue and with Gram stain, the physician may be able to plan a more effective therapeutic program. The diagnostic program should include blood culture as well; occasionally this will produce the causative organism when spinal fluid culture fails. Petechiae also should be scraped for smear and culture. The role of the laboratory in diagnosis is a vital one and good bacteriologic technique should be actively encouraged.

Causative Organisms

Our experience regarding causative organisms is seen in Figure 3.

In forty-six cases (30.5 per cent), no organism

Gram negative diplococci were seen in thirteen instances, or 8.5 per cent. There was one death, for a rate of 7.7 per cent. These cases were scattered throughout infancy and childhood.

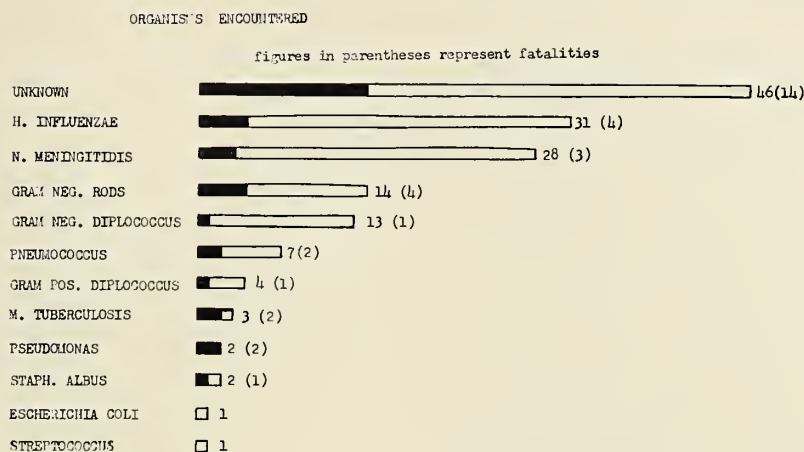


Fig. 3. Organisms encountered. Figures in parentheses represent fatalities.

TABLE III. MENINGITIS MANIFESTATIONS
(From *Pediatrics*, Vol. 17, February 1956.)

IN THE NEWBORN
CYANOSIS
FEVER
VOMITING
JAUNDICE
JITTERYNESS OR DROWSINESS
IN OLDER INFANTS
FEVER
VOMITING
JITTERYNESS OR DROWSINESS
CONVULSIONS
BULGING FONTANELLE

TABLE IV. NEWBORN SEPTICEMIA
(From *Pediatrics*, Vol. 17, April 1956.)

EARLY CLINICAL FINDINGS	
FEVER OVER 101	47%
GASTROINTESTINAL	30%
JAUNDICE	29%
SKIN LESIONS	24%
CENTRAL NERVOUS SYSTEM	15%
OMPHALITIS	9%
LATER CLINICAL FINDINGS	
FEVER OVER 101	51%
HEPATOMEGALLY	33%
ICTERUS	32%
MENINGITIS	26%
SKIN LESIONS	21%
CENTRAL NERVOUS SYSTEM	13%

was found. This group had fourteen deaths, for a mortality rate of thirty per cent.

Hemophilus influenzae was seen in thirty-one cases, or 20.5 per cent of the total number. There were four deaths for a mortality rate of 13 per cent. The ages ranged from two months to six years, with all but five in the first two years.

Neisseria meningitis was seen in twenty-eight, or 18.5 per cent of the cases, with three deaths, for an eleven per cent mortality rate. Ages ranged from two months to thirteen years, with all but eight between five months and three years.

Organisms identified only as Gram negative rods were seen from fourteen patients, or 9 per cent. Four of these died, for a mortality rate of 29 per cent. Three of this group were less than one month old, the rest were scattered throughout infancy and childhood.

Pneumococcus was identified seven times, or 4.6 per cent. The mortality numbered two, or a rate of 28 per cent. The ages ranged from one month to six years, but all except one were in the first thirteen months.

Gram positive diplococci were seen four times, or in 2.6 per cent. There was one death.

Tuberculous meningitis was proven in three patients, with one survival. A tremendous decrease in incidence compared to earlier studies that found tuberculous meningitis to be one of the most common types.³

Pseudomonas was found twice, fatal on both occasions. The ages were newborn and seven years.

Staphylococcus albus was present twice, fatal once.

Escherichia coli and *streptococcus* were each identified once. Both patients recovered.

Effect of Treatment Prior to Diagnosis

It is well known that previous antibiotic therapy often makes identification of the causative organism difficult or impossible. When this occurs, precise antimicrobial planning is usually impossible.

Our experience in this regard revealed that, of the fifty-two patients known to have had antimicrobial therapy prior to diagnosis, organisms were observed in twenty-three cases. In the ninety-nine patients not known to have had antimicrobial therapy before diagnosis, eighty-two had organisms observed. For the two groups the fatality rate did not differ significantly. Of the fifty-two receiving prior treatment, ten died. Of the ninety-nine not known to have had prior treatment, twenty-four died. This last group includes most of those having a rapid fulminating course who died a few hours after being first seen and admitted to the hospital.

Of the sixteen patients known to have residual central nervous system damage, seven were known to have had antibiotics prior to diagnosis. Seventeen of the twenty-nine patients with a hospital stay of over three weeks had also received antibiotics before spinal fluid examination.

Therapy

Once the diagnosis of meningitis is established, treatment should not be delayed. Effective blood and tissue levels of antimicrobial agents are most rapidly obtained by intravenous administration. Frequently, it is possible to do this at the same time veneclysis is performed for the blood culture.

With the large number of physicians composing the attending staff, one would expect to see a large number of therapeutic programs. However, in recent years the tendency has been for the management to become quite similar, with most patients being placed on programs closely resembling those advocated in recent articles on the subject.^{1,2,5}

When the organism is unknown, most patients receive sodium sulfadiazine, chloromycetin, and crystalline penicillin all in large dosage. Some authorities^{2,5} feel that all patients should be started on multiple antibiotics in this manner, dropping the less effective agents when the culture and sensitivity studies become available. However, others¹ feel that more accurate treatment is often possible.

In *H. influenza* infections, chloromycetin is usually the most effective antibiotic. Dosage ranges from 75 to 100 mg/k. Other broad spectrum agents and sulfadiazine are useful with this organism. *H. influenza* type B antiserum was felt to have speeded improvement noticeably in several of our own cases.

For meningococcus infections, sulfadiazine is the therapy of choice. Penicillin is often used with the sulfa.

In pneumococcus meningitis, it is generally agreed that penicillin is the most effective agent and should be administered in frequent large doses, 1,000,000 units every four hours.

Pseudomonas aeruginosa meningitis has a better prognosis now that polymixin B is available.

Tuberculous meningitis therapy is outside the scope of this discussion. The reader is referred to an excellent report.⁶

Complications

Of the early complications of meningitis, peripheral vascular collapse is the most dangerous. It must be watched for carefully and treated vigorously. The picture of acute adrenal insufficiency encountered in the Waterhouse-Friderichsen syndrome is well known and in this emergency hydrocortisone is useful. Whole blood, intravenous fluids, and levarterenol may be required as well in order to bring the patient out of the peripheral collapse.

In addition to the shock produced by acute adrenal insufficiency, it is recognized that septicemia can cause peripheral vascular collapse.^{7,8} Shock of this etiology is treated much like that of adrenal collapse with more emphasis on the use of levarterenol.

Of the thirty-four deaths in our series, postmortem examinations were performed on twenty. Of these, only two had hemorrhagic destruction of the adrenals. One of the two produced a growth of meningococcus and the other had a rash typical of meningococcemia. Meningococcus was cultured from two additional cases, and one other with a hemorrhagic rash. However, these had no anatomic adrenal abnormality. A surprisingly frequent postmortem finding was degenerative changes of the renal tubular epithelium. This was seen in fourteen of the twenty postmortem examinations. Experimental work on the effects

of hypotension on the kidneys of dogs⁹ may explain this finding.

Subdural fluid formation is another complication deserving mention. This well-described entity¹⁰ is responsible for many of the postmeningitis central nervous system defects, but is easily diagnosed and not too difficult to treat, with gratifying results when recognized early and treated properly. Diagnosis is made by subdural tap. Indications for subdural tap are: Failure of temperature curve to show a progressive decline, positive spinal fluid culture after forty-eight hours of adequate therapy, convulsions during the convalescent period, gross neurologic abnormality, clinical impression that the course was unsatisfactory, and enlargement of the head circumference.

Summary

The pediatric meningitis cases of Hurley Hospital were reviewed, and the survival rate was found to be improving.

Clinical and laboratory findings were tabulated and discussed.

The difficulty in recognition and changing physical manifestations at early age groups are discussed, and the importance of early diagnosis and early intelligent therapy is stressed.

Peripheral vascular collapse and subdural fluid complicating meningitis are discussed briefly.

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"THE MEDICAL WITNESS"

The American doctor, increasingly on call as a courtroom witness, is about to receive expert help in presenting his testimony.

The American Medical Association and the American Bar Association have joined forces for the first time to present a series of educational films dealing with the professional relationships of doctors and lawyers, according to announcement by Dr. George F. Lull, secretary and general manager of the AMA.

The first film in the series, "The Medical Witness," had its premiere showing at the AMA's clinical meeting in Seattle, Washington, November 27. The film is now available for showings before medical societies, bar associations, and other professional groups throughout the country.

"The Medical Witness," a thirty-minute black and white 16 mm. film, depicts right and wrong methods of presenting medical testimony by re-enacting the trial of a personal injury case. The series is being produced by The William S. Merrell Company of Cincinnati, ethical pharmaceutical manufacturer, as a service to the medical and legal professions.

Stressing the "vital importance of these films to all doctors and lawyers," C. Joseph Stetler, head of the AMA's law department, said:

"Medical testimony is required today in from 60 to 85 per cent of all cases litigated.

"The taking of medical testimony is at the core of court operations in personal injury cases. Medical societies and bar associations are increasingly concerned

about the problems which arise in the practice of presenting medical evidence through partisan experts hired by parties to law suits.

"The Medical Witness," the lead-off film in this series, shows doctors and lawyers how to develop expert testimony that is truly objective and scientific and in the best interests of the plaintiff, the judge and the jury.

"Our central purpose in all these films is to acquaint doctors and lawyers with each other's professional, procedural and ethical problems in litigation and other areas where two professions come into contact."

"The Medical Witness," Mr. Stetler said, deals specifically with questions that concern both professions, such as the following:

1. What is and should be the relationship between the medical witness and the lawyer?
2. What is the most effective way to examine and cross-examine the medical witness?
3. How does the medical witness support his opinion?
4. How does a jury react to the testimony?

Medical societies wishing to arrange for showings of "The Medical Witness" and later films in the series, may write to the Film Library, American Medical Association, 535 North Dearborn Street, Chicago 10, Illinois. Bar associations should write to the National Legal Audio-Visual Center, Indiana University, Bloomington, Indiana.

A Plea for Preschool Eye Care

By R. T. Blackhurst, M.D.
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THOSE of you who have two good eyes may regard this brief article with little interest, and many of you will retain none of its content. Those of you who have but one good eye may momentarily reflect back on your childhood and wonder what, through the span of years, that tremendous handicap has meant to you. Such reflection may bring forth a question. What are we as physicians doing for today's children with similar visual defects? The answer may bring surprise and disillusion! There are more one-eyed children of school age being seen by ophthalmologists today than ever before.

The school health program is a huge success and a growing tribute to the general practitioner and pediatrician. In contrast, the school vision screening program is sending us an alarming number of partially blind "healthy" young Americans. In most cases this partial blindness could have been prevented.

It would seem that the problem is one of ignorance—ignorance of the growth and development of vision. If we as physicians have been negligent or lethargic, certainly parents must be excused. All of us have been taught the fundamentals of child development. Even the most conscientious parent, however, can be expected to have only the most meager knowledge of vision. Most of them honestly feel secure in waiting until the child reaches first grade before having that initial eye examination. Currently many parents even wait for the results of the first school screening of the child's eyes. For many years parents have understood that dental health is best assured if the teeth are checked by age three, and yet there is almost universal ignorance as regards the more important topic of how eyesight develops.

The problem is twofold. It involves the early detection (and treatment) of: first, eyes which are poorly aligned, and, second, eyes which have an optical defect (hyperopia, myopia or astigmatism), particularly when only one of the eyes is involved. When left undiscovered and untreated, the end result in either case is often the same—

permanent loss of all useful central vision in one eye (amblyopia).

Each of us has two separate and distinct types of vision—one peripheral and one central. Peripheral vision is present at birth or develops shortly thereafter. It is this function which permits an infant to follow lights and moving objects and which later permits him to walk without bumping into things. The peripheral fields of the two eyes partly overlap and are therefore part of the binocular pattern, although they alone cannot maintain useful binocular vision.

Central vision on the other hand develops slowly and gradually throughout the first six years of life. A small infant has no ability to fixate—no critical or sharp vision. This process so important for reading, driving, watching "TV," et cetera, consists of only a few degrees in the central portion of the visual field. It is the essential backbone of binocular vision and stereopsis. Without it there can be no guarantee of parallel or straight eyes. The visual mechanism cannot be expected to maintain permanent alignment in the absence of two sharp, identical pictures which may be fused into a single perception. Young eyes develop by doing. Only by constant repetition of the process of observing, studying and concentrating on small objects, shapes and outlines does central vision develop in the eyes.

Amblyopia affects only central vision. It is actually "an island of blindness in a sea of vision." This is true because the brain must ignore only that portion of a picture which is sharp enough to be objectionable.

This central "island" can easily be demonstrated. Hold a cigarette between the thumb and forefinger of your left hand extended directly away from the shoulder. Now concentrate on the thumbnail of the right hand held fourteen to sixteen inches in front of your face. If you slowly move the cigarette toward your extended right thumb you will find that it cannot be recognized as a cigarette until it is within fourteen to sixteen inches of the thumb. The presence of a filter

cannot be determined until the cigarette is within five or six inches, and the brand name cannot be read until it is directly in line with the thumb. This small area where the name can actually be read represents central vision, and it alone is involved in amblyopia.

Normally each eye receives a picture—two pictures reach the brain and are blended into one—a single binocular perception resulting in stereopsis. If the eyes are not absolutely straight, two different pictures are presented to the brain and cannot be fused into a single perception. This situation cannot be tolerated, so a reflex pattern is developed whereby the brain ignores one of the pictures it is receiving. The eye whose picture is ignored gradually becomes lazy. It is not continually stimulated and so does not develop. If one of the eyes has a refractive error (hyperopic, myopic or astigmatic), its retina receives and transmits a picture which is blurred or distorted and likewise cannot be fused with the clear picture which the brain receives from the fellow eye. Here again the offending image is ignored, and central vision does not develop.

This deficiency of central vision, or amblyopia, is gradual in onset, and may be easily corrected if discovered early. However, the reflex pattern which has been set up soon becomes fixed. Once a child has reached the age of seven or eight years, it is seldom possible to restore or reclaim the lost central vision.

Often times it is the fortunate child who has an optical defect involving both eyes. He is frequently discovered early in life and corrective glasses restore normal vision and permit further development of that individual's ability to see clearly and binocularly. In such a case the presence of one good eye did not mask the less fortunate fellow.

Whether due to an optically defective eye or a crossed eye, amblyopia can usually be corrected—and nearly always so, if discovered early. Glasses can be prescribed and well tolerated by a child of one year. The defective eye can be made to exercise its capabilities by occlusion of the better eye. Occlusion started within the first two or three years of life is usually rapidly successful if correctly and continuously carried out. The amblyopia is not yet deep seated enough to be irreversible. Corrective glasses, patching (occlusion) of the good eye, and surgery when then necessary to further straighten crossed eyes, may well result

in a normal child before school age. When, conversely, treatment is delayed until the age of five, six or seven, the "isle of blindness" is so secure that only prolonged continuous patching can result in any improvement at all—and often this falls far short of normal acuity.

Nowadays, the infant or preschool child with a marked convergent or divergent strabismus is referred immediately to the office of an ophthalmologist where he is treated and often completely corrected before reaching school age. Less fortunate is the child who has a slight strabismus with a barely noticeable deviation. Often he is missed entirely or, when discovered, not referred for treatment because it is too widely felt, even among physicians, that these small deviations will correct themselves.

Although the diagnosis and treatment of such cases has never been cut and dried, hours of thought by many interested people is rapidly resulting in a still changing but gradually crystallizing approach to the problem. The busy practitioner who has been confused by opinions and writings of our own members may now acquire definite answers to most of his questions and be given a simplified program which will satisfy most ophthalmologists and save many eyes.

All of us understand that an infant of less than three months has very little co-ordination and only fair control over his voluntary muscular components. His eyes may not always appear straight! But neither will they always appear crossed! They are normally straight, but may be temporarily in poor alignment while moving to or from the central position. Constant or nearly constant deviation of the visual axes is not normal in a child of any age.

Very often, in conjunction with a "button-nose," an infant will have a wide epicanthal fold of skin which covers a portion of the sclera medial to the cornea and gives the appearance of crossed eyes when the visual axes are indeed parallel. This child may "needlessly" be referred to an ophthalmologist. However, this is a mistake we all make, and I have yet to see a mother angered by the referral. The mistake is usually hers as well as the doctor's. She is relieved and, moreover, thankful that her physician is interested and attentive. It is an "error" in the right direction.

Even this small error may be avoided if the doctor will draw together the skin over the bridge

of the infant's nose, thus uncovering the hidden sclera, and look once more at the eyes. Further security may be gained by a simple and effective "light test." Attract the infant with a small fixation light held three to five feet from its eyes. If the corneal light reflex strikes the middle of both pupils, the visual axes are normally aligned.

The thinking of most practicing ophthalmologists has jelled on the matter of time for referral of these infants. We must "get them early." Crossed eyes do not correct themselves with time. Time extends the physical and emotional defect. The deviating eye becomes lazy; the brain establishes an abnormal pattern of seeing—one difficult to break up: paretic muscles upset the ocular muscle balance so that later diagnosis is more difficult; and most importantly the child is getting older—those few important months during which a child's brain develops the ability to use both eyes together are rapidly slipping away. By the time the child is of school age the battle has either been won or lost. Parents appreciate their doctor's advice and will always continue to thank him for that "early referral."

The ophthalmologist has many things to determine and evaluate when he first sees this infant with crossed eyes. Is the defect nonparalytic (the common type), or paralytic? If paralytic, what muscle is involved? At what age was the defect first seen? Was it at first constant or intermittent? Is it always the same eye which deviates? Do other members of the family have a similar defect? Did the infant enjoy a normal, spontaneous, full term birth?

Based on information gathered from you and the parent, and on a careful and surprisingly effective examination of the infant, he may suggest temporary patching of the nondeviating eye, or alternate patching of both. This helps him rule out a possible paresis or anatomic defect of one or more of the ocular muscles. In ocular tortecollis it often helps him determine the affected eye and thus the paretic muscle before the child is old enough to co-operate in an objective study. More

commonly, it establishes the fact of equal or unequal vision in the two eyes.

Before a child is one year old he may be carefully examined under cycloplegia, and if a large or contributory refractive error is found in one or both eyes, glasses will be prescribed and, surprisingly enough, proudly and co-operatively worn. Remember that this child is not enjoying normal vision as we know it. When required, glasses are quickly appreciated. If glasses alone do not correct the deviation, supplementary surgery may effectively be performed at this age.

It is apparent from the preceding paragraphs that our only hope in reducing the number of visual cripples in our school system is to begin treatment long before the school bell rings. Accordingly, we appeal to already overburdened general practitioners and pediatricians to add one more item to the examination of the one, two, or three-year-old infant. Make a sincere attempt to evaluate the vision in *each eye*. Help us discover amblyopia while there is still time for successful treatment. Urge a child to fixate a pocket-light, coin or a small toy. Cover one eye then the other; ask yourself if he fixates and follows with equal ease using either eye. Try him on a picture chart while the eyes are alternately patched. Throw a few cotton balls on the carpet before an infant and see if he retrieves them with equal ease using right and then left eye. If you question the equality of vision; by all means repeat the tests at a later date.

If further information is desired, dilate the pupils with 5 per cent homatropine or 1 per cent cyclogyl* and study each retina carefully. They should be seen with equal ease and clarity. Refer all doubtful cases to a capable eye physician. The child and its parents will be grateful.

Practice these tests on your own child—you may be surprised! Trouble is often found where least expected!

*Cyclogyl 1 per cent, brand of cyclopentolate hydrochloride, Schieffelin & Company, New York 3, New York.

BRAIN TUMORS

In fifty brain tumors confined to the occipital lobe, the *symptoms* in order of frequency were: headache, nausea and vomiting, defect of visual field, failing visual acuity, ataxia, hallucinations and diplopia.

The *signs* of brain tumor in this same series in order

of frequency were: defect of field, papilloedema, cerebellar signs, weakness of face or extremities, aphasia, alexia, visual agnosia and agraphia, sixth nerve palsy, inactive pupils and paresis of accommodation.

Rheumatic Fever Prophylaxis

By Robert E. Fisher, M.D.
Battle Creek, Michigan

A NOTE in *Circulation*, XIV, 1020 (November, 1956) states that there were thirteen recurrences of rheumatic fever in a group of 400 children who had been on prophylaxis two years. Four were on sulfadiazine, nine on oral penicillin and none on benzathine penicillin G intramuscularly.

Effective January 1, 1957, the prophylaxis program of the Michigan Department of Health and the Michigan Crippled Children Commission has been expanded to include the use of sulfadiazine when the doctor feels that benzathine penicillin G is harmful to the child. He may secure sulfadiazine by so noting on the "Requisition for Benzathine Penicillin G," Health Department Form C-62A, in quantity of three bottles of 100 tablets of 0.5 gm., a five-month's supply for anyone weighing over sixty pounds. This is obtainable for anyone who has rheumatic heart disease or who has had rheumatic fever upon reporting the case on the requisition form, at no cost to the doctor or his patient.

Fees for regular follow-up office visits and necessary laboratory work may be paid from trust funds administered by the Michigan Crippled Children Commission when the child is not yet twenty-one and has been the subject of a court order under the Crippled or Afflicted Children's Acts. An amount equivalent to that which benzathine penicillin G administration would entail has been made available for these services. The laboratory work may be done by the doctor or by the hospital to which he sends his cases; in the latter case, the laboratory must be one at a hospital approved for care of afflicted children. The published Michigan Crippled Children Commission fee schedule applies.

An initial visit, with progress visits one, three, five and then every two and one-half months thereafter, with a urinalysis, hemoglobin, white blood count, differential on the initial and next two visits and at seven and one-half months and

every five months thereafter, can be alternated with visits without laboratory work at five months and every five months thereafter to check on the use of medication, or the child can be seen less frequently or more frequently, within the monetary allowance, as the doctor desires.

A report is required on each visit. When four visits have been made, the report is submitted with an invoice-voucher for payment for the service rendered.

Members of the Michigan State Medical Society provide, through the Rheumatic Fever Diagnostic Centers, consultation service for doctors seeking clarification of the diagnosis and recommendations for therapy. Where the cost of the consultation prevents use of the service, in the case of a minor, the doctor may execute Michigan Crippled Children Commission Form 121 (Physician's Certificate) requesting such a consultation. The cost of transportation to the Center cannot be paid by the Commission, but the Center's fee for service is paid under the order pursuant to the certificate. Should the recommendation be that prophylaxis is indicated, this patient who has had a court order, albeit limited, is eligible for inclusion under the prophylaxis program. It must be understood that a court order is not a prerequisite to the obtaining of benzathine penicillin G or sulfadiazine from the Michigan Department of Health, and the doctor may charge a fee for its administration and supervision with propriety.

As of January 1, 1957, the Michigan Crippled Children Commission has received billings for administration of 552 doses of benzathine penicillin G to 140 children. In four cases injections were discontinued. There were no rheumatic fever recurrences reported, but one patient developed subacute bacterial endocarditis while on benzathine penicillin G, was treated with penicillin, and is back on benzathine penicillin G prophylaxis.

"A Diagnosis of Rheumatic Fever is a Mandate for Prophylaxis"

Dr. Fisher is Medical Co-ordinator, Rheumatic Fever Program, Michigan Crippled Children Commission.

Rubella in Pregnancy

By Warren H. Pearse, M.D.

Ann Arbor, Michigan

RUBELLA occurring in the pregnant woman has recently been presenting an increasing problem to obstetricians. What incidence of fetal anomalies is to be expected? Is therapeutic abortion justified when rubella occurs? What can we tell our patients who develop rubella in early pregnancy—in late pregnancy? There appears to be considerable confusion as to the correct answers to these questions, and we therefore undertook a review of available information to clarify, insofar as possible, our own thinking regarding these questions.

Rubella, or "German Measles," is a self-limited communicable viral disease, characterized by mild constitutional symptoms, a transient maculopapular rash, and swollen, tender postauricular and postoccipital lymph nodes. It often occurs in epidemics with rubeola, especially in the spring, and one attack confers a permanent immunity. It can be distinguished without particular difficulty from such conditions as scarlet fever, rubeola and exanthem subitum. However, because of the mild nature of the disease a physician is not always consulted.

Rubella had always been considered a benign infectious disease of childhood until the epic work of Gregg¹ disclosed the high incidence of congenital cataracts in the eyes of infants delivered of mothers who had contracted rubella during the Australian epidemic of 1941. This was later amplified by Swan, et al.,² and gradually a series of defects including deafness, congenital cataract, congenital heart disease (largely patent ductus arteriosus), central nervous system damage and dental malformations were related to the disease. Our concern here is with rubella only, and although isolated case reports of a variety of deformities in mumps, measles, chickenpox, herpes zoster, infectious hepatitis, infectious mononucleosis and poliomyelitis have been made, there is at present insufficient evidence to incriminate these in any way comparable to rubella.³ It is also

to be emphasized that the usual mild course of rubella is seldom altered by pregnancy, and the concern is not for the mother, but specifically regarding possible damage to the fetus.

What then are the possibilities of fetal damage if the pregnant woman develops rubella? The data from the Australian epidemic of 1941 have been summarized by Collins.⁴ In 383 cases of maternal rubella during various months of pregnancy the incidence of fetal anomaly was as follows:

Month	Per Cent
1	79%
2	90
3	80
4	78
5	24
6	21
7	27
8	25
9	0

However, the dangers of a retrospective study (i.e., finding anomalies and then looking back to see how many mothers have had rubella) have been pointed out by most authors, and this study was of that nature. In the same summary Collins stated that a study in Queensland of every pregnant woman who had contracted rubella during the first trimester of her pregnancy in the year 1941 revealed only a 30 per cent incidence of affected infants.

An ideal study—one in which pregnant women who develop rubella are observed to term and the infants studied together with adequate controls—is difficult of realization. However, such an investigation has been approached by Lundstrom⁵ who analyzed an epidemic of rubella in Sweden in 1951. All patients who delivered or aborted in a maternity hospital (as do 94.1 per cent of Swedish mothers) were questioned in detail about exposure to or development of rubella. Lundstrom's findings are summarized below. *Anomaly* encompasses any defect present at birth, including such things, besides the "rubella syndrome," as hypospadias, multiple nevi, hydrops fetalis and even asphyxia neonatorum. The group of *stillbirths and neonatal deaths* includes the occurrence of these from all

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TABLE I. LUNDSTROM'S SUMMARY OF RUBELLA EPIDEMIC IN SWEDEN IN 1951.

Group	Contracted Rubella		Contact—No Infection				Controls
	1-16 weeks	16-40 weeks	Non-Immune		Immune		
			1-16	16-40	1-16	16-40	
Anomaly	4.5 %	3.4 %	1.8 %	1.3 %	5.4 %	0.7 %	1.4 %
Stillbirth & Neonatal Death	5.9 %	2.1 %	3.5 %	3.1 %	4.4 %	1.6 %	3.2 %
Cases	579	450	344	508	153	240	2226

causes except complications of late pregnancy and delivery. This group also includes malformed dead infants. Durations of pregnancy are calculated from the first day of the last menstrual period.

Some criticisms can be made. The diagnosis of rubella in these cases was not always medically confirmed. 275 cases who were "legally aborted" were excluded, as were 107 who received convalescent serum. Some defects actually present, such as deafness, might not have been recognized at birth. Perhaps the latter would be compensated for by the author's inclusion of minor anomalies unrelated to the infection. In any event, this large well-controlled study certainly indicates a much lower fetal risk than previously believed.

Figures from the United States are not so readily available. Ingalls and Purshottam⁶ summarized in 1953 the results of previous small studies together with their own.

—AD—table II

Greenberg⁷ (quoted by Krugman and Ward) reported a series of eighty-two patients who contracted rubella in the first trimester. There were nine stillbirths (11 per cent) and five anomalies (6 per cent). A recent report of Brawner⁸ concerns twenty-six cases seen in a mild outbreak in Georgia in 1952. These are listed as available cases; whether others may have occurred is unknown. Fifteen cases in the first trimester produced four anomalous infants and one stillbirth (33 per cent). Seven cases in the remainder of pregnancy gave rise to only two minor muscular abnormalities, probably unrelated to rubella. Four patients had therapeutic abortions performed.

As information accumulates, it would seem there is little risk when the mother develops rubella beyond the sixteenth week of gestation. Prior to that time, we can estimate an incidence of about 5 to 7 per cent fetal anomalies and 6 to 10 per cent stillbirths on the basis of the larger studies presently available.

TABLE II. INGALLS AND PURSHOTTAM'S SUMMARY OF RUBELLA AMONG PREGNANT WOMEN IN THE UNITED STATES.

	Cases	Anomalies	Stillbirths
1st Trimester	42	3	4
2nd Trimester	23	2	2
3rd Trimester	7	0	0
	72	5 (7 %)	6 (8 %)

What should be the program when rubella exposure occurs during the first sixteen weeks? At present, pooled gamma globulin or convalescent serum is being administered, but its effectiveness is open to question. Krugman and Ward⁷ conclude from four separate studies that neither convalescent serum nor ordinary gamma globulin has been consistently effective in prevention of rubella. With the use of these preparations there is an additional problem. The course of rubella may be modified so that it occurs in a subclinical form, but anomalies apparently do develop from this type of infection while the patient and her physician may be falsely reassured that the disease did not occur.

If rubella develops in these first sixteen weeks, should therapeutic abortion be performed? This may, of course, be impossible because of moral or religious beliefs. It is also interesting to note that under the laws of the state of Michigan pregnancy can be interrupted only to preserve the life of the mother. Interruption for fetal indications would be well outside this boundary. This latter dilemma is not peculiar to Michigan, however, as a recent summary of therapeutic abortions in New York⁹ states that even many abortions agreed to by a hospital staff committee may be in a quasi-legal group.

Outside the above considerations, certainly the age, parity and ease of conception of the patient must be taken into account. With these facts at hand, each physician must decide whether a 5 to 7 per cent increased incidence of fetal anomaly or the risk of stillbirth should prompt consideration of interruption of pregnancy in a mother less than sixteen weeks pregnant.

Summary

1. The rubella problem in pregnancy has been reviewed.

2. Large series of recent years show an incidence of fetal anomalies of 5 to 7 per cent and

(Continued on Page 363)

The Physician and the Adoption of Children

By Ernest H. Watson, M.D.
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THE ADOPTION of children is "big business." Each year there are approximately 150,000 illegitimate births and 25,000 to 30,000 young children who lose their parents through death, separation or desertion. Each year there are approximately 90,000 adoptive placements, about half of which are not made by official agencies.*

Physicians, particularly general practitioners, obstetricians and pediatricians, are frequently asked by persons and agencies involved in adoption to give opinions and lend aid in one way or another. What may the physician ethically and properly do to aid children find a home, and childless couples to obtain a child? What should the physician refuse to do in this connection?

I should like to emphasize one point at the beginning because it should have priority over all others: The first consideration in all adoptive placements should be the finding of a good home for the child. Next, we can place the problem of finding a child for a family, and of lesser importance must be the solution of the social problems of illegitimate pregnancy, payment of hospital bills, relief of a county or community of the burden of caring for a homeless child.

The first and most natural mistake for a physician to make is to agree to help some childless couple find a child for adoption. The physician is likely to place himself immediately in the partisan position of being an agent, in a sense, of the childless couple. If they are friends or patients of his it may be difficult for the physician to do what he should do, and in some states the only thing he can legally do, i.e., to refer the couple to an official child placement agency. He is likely to feel like he is "passing the buck" or letting his friends down. Such is not the case. It may be a real disservice in the long run to put the childless couple in touch with some illegitimately pregnant

woman who is looking for financial aid and seeking disposition of her unborn, unwanted baby. As immediately helpful as this arrangement might be to the child's natural mother, it violates one cardinal principle of successful adoptive practice, namely, complete anonymity between natural and adoptive parents. Blood relationship of parties involved sometimes makes it necessary to ignore this principle of anonymity, but even then the future relationships are in some jeopardy.

The physician may believe that his knowledge of a childless couple is as good or better than any possible social history obtained by an agency worker and it may be so, but another principle of proper adoptive practice involves an investigation of the family by a completely nonpartisan agent. This investigation must be thorough enough to establish the quality and integrity of the family and their motive for wanting to adopt a child. This latter seems obvious at first glance, but is not so simple. Some couples want children to be in style in their social set; some want to pull together a marriage threatening to fall apart; some wish to replace a lost child; others because they love children and feel an aching void because of their childlessness.

The Child Welfare League of America has suggested the following set of minimum safeguards in adoption:

- I. The safeguards that the child should be given are:
 1. That he be not unnecessarily deprived of his kinship ties.
 2. That the family asking for him have a good home and good family life to offer, and that the prospective parents be well-adjusted to each other.
 3. That he is wanted for the purpose of completing an otherwise incomplete family group in which he will be given support, education, loving care, and the feeling of security to which any child is entitled.
- II. The safeguards that the adopting family should expect are:
 1. That the identity of the adopting parents should be kept from the natural parents.
 2. That the child have the intelligence and the physical and mental background to meet the

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*An official agency in Michigan is one licensed by the State Department of Social Welfare to place children for adoption. The only public agency authorized to place children for adoption in Michigan is the Michigan Children's Institute in Ann Arbor.

reasonable expectations of the adoptive parents.

3. That the adoption proceedings be completed without unnecessary publicity.

III. The safeguards that the state should require for its own and the child's protection are:

1. That the adopting parents should realize that, in taking the child for adoption, they assume as serious and permanent an obligation as do parents rearing their own children, including the right to inherit.
2. That there be a trial period of residence of reasonable length for the best interests of the family and the child, whether there be a legal requirement for it or not.
3. That the adoption procedure be flexible enough to avoid encouragement of illegitimacy on the one hand, and trafficking in babies on the other.
4. That the birth records of an adopted child be so revised as to shield him from unnecessary embarrassment in case of illegitimacy.

The physician should be aware of the requirements of Michigan Law on adoption. The law (comp. Laws Michigan (1948) Section 710.1—710.14) states that the judge of probate is required to have a full investigation "by the county agent, probation officer, or by a placement agency licensed by the state, or by the Michigan Children's Institute or the State Department of Social Welfare." The purpose of the investigation is to determine several things: The integrity, health, and stability of the home into which it is proposed to adopt the child, the physical and mental health of the child, the child's family background and suitability of the child and adoptive parents on racial, religious and cultural backgrounds.

Legal Provisions Which the Physician Should Know

1. Adoptions are under jurisdiction of the probate court of the county in which the petitioners reside.
2. Consent of both parents must be obtained, except in cases of illegitimacy where the natural mother's consent alone is enough.
3. Release of the child by its parents (or by its natural mother in case of illegitimacy) to the probate court prior to any steps toward adoption is highly desirable, since it makes much easier the preservation of complete anonymity between natural and adoptive parents.
4. The probate court must order an investigation of the principals and circumstances in every case of adoption.

5. The only entirely legal way in which the physician can act as the go-between or "arranger" in the matter of adoption is either to have himself appointed guardian of the child while arrangements are being made, or, second, to obtain a license from the Department of Social Welfare to serve as an authorized child-placing agency. Both of these activities seem out of character and at the least an unusual role for the busy physician. He could find himself with guardianship or other responsibilities far more demanding than he had bargained for.

6. A physician (or hospital) may not give "free" services to an illegitimately pregnant woman on the condition that she release her baby for adoption to a certain couple.

7. A physician cannot legally prevent a mother from seeing her child (as in case of a new born illegitimate infant in the hospital) simply because she has previously indicated an intention or even an agreement to place the child for adoption. Only the probate court can sever parental rights.

8. Hospitals, clinics and maternity homes giving maternity service are required by Michigan law to file a special report on illegitimate births. The physician is liable to fine and worse if he conspires to hide the fact of illegitimacy by having the mother register at the hospital under an assumed name and status. One common violation of the law is to have the mother register in the name of the wife of the couple planning to adopt the baby. This, if it works, does get the baby a birth certificate carrying the family name he will presumably have, but it is an illegal stratagem full of chance of trouble for all concerned. There is no need to go to such lengths as far as the birth certificate is concerned. In cases of proper adoption the judge of probate can issue a new birth certificate carrying the adopted family name and covering the fact of illegitimacy.

From the foregoing it can be seen that the judge of probate will order a complete investigation and that the physician cannot and should not attempt to "short-cut" these necessary legal procedures which are based on sound considerations. If there is still doubt in the physician's mind as to the qualifications and desirability of an official adoption agency taking charge, consider the following contributions of the professional agency staff as set forth in the Child Welfare League of America's publication "A Study of Adoption Practice":

1. Only an agency offers the child and adoptive parents a wide choice as a safeguard to suitable placement. The agency may have a hundred couples from which to choose just the right home for a child.
2. An agency offers experienced staff to assemble and evaluate professional data of various kinds—medical, legal, psychological, et cetera—in the light of the specific child-parent situation. (The physician is not a social worker.)
3. Only an agency prepares, preserves, and makes available the record of the whole transaction.
4. There is the major advantage that the agency acts as the confidential intermediary between the natural parents and adoptive parents.
5. The agency brings a large body of experience into this field, which cannot be matched by those doing private adoptions.
6. The agency can assure care for the child if he becomes unadoptable—a protection for the natural parents and adoptive parents, as well as the child.
7. Casework with the natural parents, which can be given only by an agency, gives assurance that the surrender is final.
8. Assurance that the adoption will be consummated legally, or else that some other appropriate form of care will be provided for the child.

The physician can give advice to agencies and persons involved in adoption practices only when he knows certain facts relating to the principals involved. He is most often called on to "give an O.K." on the physical and mental status of a child to be placed. Obviously, the younger the child the more difficult it is to appraise mental development, even when a psychologist's help is available. In most instances, the physician is not given a good enough medical history of the infant's ancestors to enable him to give a good opinion on the possible inheritance of undesirable traits by the infant. Thus, it is obviously important that all persons in a position to know facts of medical importance in this connection make them a part of the child's hospital and agency record. Everyone gives lip service to the ideal of early adoption (early infancy); this may definitely be brought about if a good family and medical history of both natural parents is available. If babies are adopted as early as a few weeks of age, it seems highly advisable from the medical standpoint to insist that the usual one-year probationary period not be waived (it can be waived by the judge of probate) and that the infant be re-examined repeatedly during this year. It should be kept in mind, of course, that most couples who adopt babies run little if any more risk that the child

will not "turn out well" than if they had been the natural parents themselves. Proponents of the environmental school will agree with this. Those who believe that the genes largely determine the traits, abilities, et cetera, of the adult will not agree so wholeheartedly. Even so, most ventures of life, such as marriage and parenthood, are fraught with some chance taking. Each adoption, just as each birth of a child into a family has the element of chance in the eventual outcome.

Summary

The role of the physician in adoptions should be a medical one only. He is not a social worker, nor should he try to substitute for the legally constituted authorities in this very important function. The physician is essential for only he can give advice on matters of health, growth and development, and genetic influences relating to the infant, and the natural mother's prenatal care. The details of the birth, and medical and developmental records on the infant are all extremely important factors in final decisions as to placement. Few, if any, human beings are perfect specimens. This applies to babies up for adoption. Only a physician can advise on the probable long term influence of such abnormal findings as the child may have. Physicians should know the agencies in the community to which he can refer childless couples seeking infants or natural parents who think they cannot take care of children (born or unborn). The physician is usually in a position to help the agency and to increase its effectiveness and prestige by his support. Finding the right home for a child is sufficiently important for all persons involved therein to work together.

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Hyperextension of the Fetal Head in Breech Presentation

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THERE are several factors concerning the diagnosis and management of breech presentation which are well known from repeated experience. The purpose of this paper is to review available literature on one complication of breech presentation, namely the hyperextension of the fetal head, and to present an additional case.

Though the incidence of breech presentation is approximately 4 per cent of all deliveries in numerous reported series of breech studies, there are to date only twenty cases of hyperextension of the fetal head reported in the literature. The first work was done by Brakemann,¹ who estimated that in 11 per cent of breech presentation the head was extended in some degree. He postulated that this increased the duration of labor and contributed to a difficult delivery. This work was supported by Stein² in his study of deflexion of fetal parts in breech presentations. He warned that the fetal attitude and presentation must not be assumed to be static. This concept must be realized for the intelligent management of the individual case. It may also explain the spontaneous correction of these abnormal presentations. The advisability of attempting external version is questioned because of the basic etiologic conditions making the breech presentation necessary. Stein does not consider deflexion attitudes to be an indication for Cesarean section. He feels that fundal pressure during delivery may be used to deflex the extended parts. Vaginal delivery was accomplished in the two cases reported, one using manual flexion of the head through the vagina before engagement of the head. The second case was one with an arcuate uterus. In 1948, Taylor³ reported one case of hyperextension of the head in a breech presentation which was delivered by Cesarean section. Roentgen rays of the infant on the sixth neonatal day demonstrated an anterior dislocation of C1 on C2 and of C3 on C4. These were treated successfully with splints. In the same

year, Melody⁴ reported a case with spontaneous correction of a hyperextended head. The infant had bilateral posterior dislocations of the tibia, suggesting the association of dislocations with hyperextension and flexibility of the spine.

Wilcox⁵ reported eleven cases of hyperextension of the head in a series of 1918 breech deliveries. The majority were treated conservatively. Cesarean section was done in four of these cases: two for contracted pelvis, and one each for placenta praevia and prolonged labor. The fetal morbidity was high. Following vaginal delivery, one infant was stillborn and one had a transection of the spinal cord. One baby delivered by Cesarean section, had a cyst on the neck which may have contributed to the extension of the head. Wilcox disagrees with Brakemann in the management of these cases. He recommends individualization of the case and does advocate delivery by Cesarean section. Reis and DeCosta⁶ report two cases of hyperextension of the fetal head in breech presentation with spontaneous resolution. They state that this complication is not an indication for Cesarean section. Dougherty⁷ reports one case, delivered by Cesarean section, in which the infant's head remained in extension for several days after delivery. Eurard and Allrich⁸ report two cases, one of which was delivered by Cesarean section from an arcuate uterus. The second patient was delivered per vaginam. The infant died in twelve hours, and autopsy demonstrated a transection of the spinal cord in the cervical area.

Case Presentation

The case presentation is that of a twenty-five-year-old white female, gravida 2, para 1, admitted to the Grace Hospital on December 17, 1955, not in labor. The last menstrual period was February, 1955. The expected date of confinement was December 3, 1955. The past medical history was noncontributory. The obstetric history consisted of one living male child, weighing six pounds and twelve ounces, born by normal spontaneous vaginal delivery following a twelve hour labor, in 1954. The present pregnancy was uncomplicated. The blood pressure remained normotensive throughout. The weight gain was thirty-one pounds. One week prior to admis-

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sion a plus one edema of the ankles was noted. There was a slight trace of albumin in the urine. The hemoglobin was 13 grams. The red blood count was 4.14 million. X-ray of the pelvis demonstrated, in the right



Fig. 1. A flat plate of the abdomen demonstrating a breech presentation with extreme hyperextension of the fetal head onto the fetal spine. Hospital No. 216488.

anterior portion of the uterus, a double footling breech presentation with the head in hyperextension. The pelvic measurements were adequate except for a true conjugate of 10 cm. The patient went into spontaneous labor at 5:40 a.m. on December 18, 1955. Anticipating difficulty in delivery of the hyperextended fetal head, a low cervical Cesarean section was done under local and intravenous penthotal anesthesia. The living seven pound, two ounce, female infant was of normal development. The head tended to remain in hyperextension for six weeks following delivery. No maternal factors were noted to explain the breech presentation.

Discussion

Hyperextension of the fetal head in breech presentation is not common. It is defined as hyperextension of the fetal head with flexion of the fetal spine, and with no relation to the position of fetal extremities. It must be differentiated from opisthotonus fetal, which was defined in 1915 as a condition in which the fetal spine is hyperextended throughout its length. It usually occurs in transverse presentations. The etiology of hyperextension of the fetal head in breech presentation

is not known. Reis and DeCosta favor chance occurrence. Wilcox postulates fetal abnormalities, such as cysts of the neck, spasm of the fetal muscles, and uterine anomalies as the arcuate uterus of Stein and of Eurard, or space-occupying uterine tumors. Certain hypermobility of the fetal joints must be considered as evidenced by the frequent association of dislocations of the spine and other fetal joints with cases of hyperextension of the fetal head. The definite diagnosis is made by x-ray.

The presence of this condition does not influence the course of the pregnancy. It does not increase maternal morbidity except for that normally associated with Cesarean sections. Fetal morbidity is increased due to the basic cause of the breech and to the hyperextension of the head. Transection of the spinal cord with dislocations of the cervical vertebrae are the real dangers.

There is disagreement as to the management of these cases. Stein and Reis and DeCosta advocate vaginal delivery. Wilcox and Dougherty state that this is an indication for Cesarean section, but that the treatment in each case should be individualized.

Summary

A review of the literature and a case presentation of hyperextension of the fetal head in breech presentation is given. The etiology of this condition is unknown. The maternal morbidity is not increased, but the fetal mortality and morbidity is increased. The management is to effect delivery through the vagina or by Cesarean section when indicated.

Acknowledgment

Grateful acknowledgment is given to Dr. K. Miller, for permission to present this case.

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Management of Breech Presentation and Delivery

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BREECH presentation is always a timely topic for discussion because breech delivery still carries even a corrected fetal mortality of about 4.2 per cent^{1,2} in all but a few of the larger hospitals and teaching centers in this country. This correction is obtained by excluding all cases of prematurity, previability, and developmental abnormalities. Thus breech delivery still entails a fetal risk four times that of cephalic delivery. Also, the fetal mortality is much higher when infants weighing less than 2,500 grams and more than 4,500 grams are delivered as breeches rather than cephalically.

Autopsies on fetuses (not exhibiting congenital anomalies) that died during breech delivery or within the first two neonatal weeks have shown, in 40 per cent, that death resulted from cerebral hemorrhage, in 18 per cent from asphyxia, in 16 per cent from "unknown cause," in 8 per cent from prolapse of the cord, and from bronchopneumonia, cerebral edema, and stillbirth of unknown cause in 4 per cent each.² In Calkins'³ recently reported series of breech deliveries nearly half of the infants (again excluding the congenital anomalies) died of "trauma," prolapsed cord, or "unknown cause."

While there has been no demonstrable increase in fetal mortality with breech (as against cephalic) delivery, the maternal morbidity associated with breech delivery is from 8.5² to 9.9⁴ per cent, representing, therefore, about a four to five-fold increase over that of cephalic presentation. The morbid factors most commonly present are urethritis, cystitis, pyelitis, thrombophlebitis, infected and disrupted episiotomies, and endometritis.² The maternal morbidity in breech extraction was 18.4 per cent, while in spontaneous and aided breech deliveries it was only 5.3 per cent; 10.3 per cent of primiparae having breech

delivery were morbid, while only 6.9 per cent of multiparae were so troubled.²

Prolonged labor occurred in 8.7 per cent of Schmitz's series of 1,512 breech deliveries,² which is an incidence several times greater than the average, and one-fifth of all the fetal deaths in his series occurred in the prolonged labor group. A particular danger of prolonged labor in breech presentation is the inability to judge accurately when dystocia is due to fetopelvic disproportion. Thus we see that breech delivery offers some very real problems, and, despite widespread improvements in general obstetric care, and some real lowering of the fetal mortality rate in breech delivery in recent years, we are still faced with the fact that it is about four times more fatal for the infant and four times more morbid for the mother than is cephalic delivery throughout the country as a whole.

In view of the serious prognosis for the baby, breech presentation should be corrected to cephalic presentation before term whenever possible. This can be done by external version, a procedure which is easily carried out in the office with no discomfort to the patient. While the majority of the teaching centers in this country neither teach nor advocate external cephalic version for the correction of breech presentation, quite a few do so, and in the hands of the obstetricians there it has been shown to have no discernible risk to mother or infant and is accepted as good obstetric practice. It is certainly true, on the other hand, that if a totally inexperienced physician attempts to turn an infant in an unknowing and nervous manner, he may very well cause some separation of the placenta.

Ryder⁵ reported having done external cephalic version personally in 290 cases in a series of 1,700 private patients, and stated that not one fetus could be shown to have suffered any harm. Adair⁶ published collected statistics on 1,105 attempted external versions done by nine obstetricians and found that vaginal bleeding occurred

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in only two instances, presumably from slight placental separation, or rupture of a small marginal sinus. In a report from the Boston Lying-in Hospital, Newell⁷ presented data on 793 patients in whom breech presentation was detected in the third trimester of pregnancy. In all, 1,161 external cephalic versions were attempted, or 1.46 versions per case. Successful turning of the fetus was accomplished in 829 cases, or 72 per cent; spontaneous recurrence of breech presentation following successful external version occurred in 27 per cent of cases, and was again corrected each time. Including the 108 instances of spontaneous cephalic version which occurred in cases in which attempted external version had been unsuccessful, only 10 per cent of the original group of women arrived at term still with breech presentation. The fetal mortality for the series was only 2.9 per cent, as against the usual figure of 4.2 per cent.

The author was taught to perform external version at the Boston Lying-in Hospital, and has always practiced it, having succeeded in turning about 75 per cent of all breech-presenting infants in thirteen years of practice, and this without encountering any known vaginal bleeding or other real difficulty. A few of the infants that were successfully turned, to be sure, had to be turned back at once the way they had come to their original breech presentation because of some slowing of the fetal heart. This occurs, presumably, because of compression of the umbilical cord in their new cephalic position, but the reverse version is easily done and the fetal heart has always picked up immediately and regained its normal rate without mishap.

The author has delivered only three⁸ infants by the breech in his private practice in the past seven years. In all three, attempted external version was unsuccessful because the breech was frank, low, and engaged from practically the twenty-eighth week of pregnancy on until term. In one case there was a large baby, and corporo-pelvic disproportion was evidenced after a few hours of labor, so section was done. The other two, both primiparae, required extraction. All three infants survived. The making of routine attempts at external version of all infants presenting by the breech, starting at twenty-eight to thirty-two weeks of pregnancy, and the repetition of the version whenever the fetus returned to its

original breech presentation, has decreased the incidence of breech delivery almost to the vanishing point in the practices of many obstetricians. The infants, in primigravidae, must be turned not later than the thirtieth to thirty-second week, in most instances, lest the breech become too deeply engaged in the pelvis to be dislodged; women having their second viable infant had best have version not later than the thirty-second week, and those having their third or fourth child can usually have the fetus turned anytime up until six to four weeks of term. I have, on one occasion, successfully performed external version between one uterine contraction and the next, in early labor, in a para-5 whose membranes were still intact, and who had a large baby and only an average-sized pelvis.

A knowledge of the position of the *in situ* placenta in the uterus is very important before one attempts external version. This is so because the placenta must not be handled or compressed during performance of the maneuver. In breech presentation it has been shown by the author⁸ that the common position of the placenta, in single pregnancies within eight to ten weeks of term, is in one uterine cornual region or the other, and that this placental implantation site is the basic cause of breech presentation. If the fetal head lies in the right cornual region, then the placenta will be found filling the left cornu, and thus external version can be performed without manipulation of that cornu which contains the placenta.⁹ When in doubt as to the existence of breech presentation, we always take a single anteroposterior, soft-tissue x-ray picture. Before performing external version we have the patient empty her bladder and lie on her back on the examining table with one or two pillows under her head and shoulders and another placed beneath her knees. We explain that her baby is presenting by its buttocks and that we are going to gently "turn it around so its head will come first." Talcum powder applied to the patient's abdomen permits freer movement of the operator's hands over the abdominal skin in applying the necessary pressure to the poles of the fetus. The pressure applied should be firm, steady, and gentle, and should be made by the flat of the hand and not by one or two fingers. We carefully auscultate the fetal heart before turning the fetus, and then auscultate it again as soon as the fetus has been placed in cephalic presentation. If the

heart is not entirely normal in the new position after one minute, the infant should be turned back, retracing the way it came around, to its original breech position. In our experience, when seen the next week, spontaneous cephalic version has occurred safely in the meantime in most of such cases.

The first step in performing the version is to dislodge the breech from the pelvic inlet, and to move it upwards on that side which will cause the infant to turn in the direction in which it is facing. If, for example, it lies in LST position, and its head is in the right cornu of the uterus, we would move the breech up along the left lateral wall of the uterus so as to rotate the baby in a counterclockwise direction. The operator, with his other hand, then grasps the infant's head and brings it down along the right lateral uterine wall, placing it finally in the midline over the pelvic inlet. This manipulation can be done safely as long as one *does not attempt to handle any fetal part if any of the placenta lies between his hand and that part.*

It is our belief that the principal danger one encounters in doing external version, namely, traumatic separation of the placenta, can be eliminated by determining in advance the placental implantation site in each case and by strictly avoiding the handling of that portion of the uterus which contains the placenta while manipulating the fetal poles. Palpation alone will disclose the fetal head in one side or other of the uterine fundus, and the placenta will then be in the opposite side. Soft-tissue x-ray placentographic films will show the location of the placenta and the exact position of the fetus.

Anatomic factors which in general may make the performance of external version difficult or impossible are: bicornuate uterus, primigravidity, frank breech with extended legs, early deep engagement of the (usually frank) breech, oligohydramnios, "extended attitude" of the fetus, and undue elongation of the amniotic sac resulting from relatively low and lateral implantation of the placenta in the cornual region it principally occupies. When external version *cannot readily be accomplished* (due to inability to disengage the breech from the pelvic canal, or when the infant cannot easily be turned after the breech has been moved up into one iliac fossa) *it is best to desist in one's attempts to turn the infant.* Our experience has shown that about two-thirds of such

fetuses will have undergone spontaneous version when seen in the office one or two weeks later. Real force should never be resorted to in the performance of external cephalic version, and it will rarely be necessary if the version is attempted before the fetal size has increased to that point at which the turning becomes difficult.

The contraindications to external cephalic version are: multiple pregnancy, history of vaginal bleeding, history of previous section, marked deformities of the fetus (such as hydrocephalus and anencephalus), ruptured membranes, and marked pelvic contracture making section a necessity. The generally accepted conditions under which external cephalic version is permissible and possible are: when the membranes are intact and at least an appreciable amount of amniotic fluid is present, when there is no polyhydramnios, when the breech is not too firmly engaged and too low in the pelvis to be safely dislodged, when a bicornuate uterus is not being dealt with, when placenta previa is not present, and when the anterior abdominal wall is not too obese to permit the necessary manipulations.

The probable reasons why more physicians do not perform external version are: (1) They are so skilled at breech delivery that their corrected personal fetal mortality rate is less than 1.5 per cent and they therefore do not feel any need to convert their breech presenting infants to cephalic presentation—this would account, however, for probably not more than 10 per cent of physicians practicing obstetrics; (2) they do not palpate the abdomen with the necessary accuracy required by the definite intention of disclosing breech presentation, nor do they do this at twenty-eight, thirty, and thirty-two weeks of pregnancy so as to discover breech presentation while it is still easy to perform external version (I have had several physicians tell me that by the time they learn that their primigravid and primiparous patients have breech presentation, the breeches are engaged and the infants cannot be readily turned); (3) there is a fear (ungrounded, in my opinion) that should they attempt external version they will dislodge the placenta or otherwise damage the infant. It is true that the same nervous hands which might exert undue suprapubic force on the aftercoming fetal head (accounting for most of the fetal cerebral hemorrhage found at autopsy), might cause some placental or fetal trauma when external version is attempted. The maneuver, to

be safe, must be done knowingly and gently by a physician who is relaxed and free of unreasonable fear.

Since all physicians practicing obstetrics must be able to perform a carefully and properly conducted breech delivery, most university teaching hospitals will not engage in any extended program of prenatal external cephalic version. Such is the case of Herman Kiefer Hospital, but external version is demonstrated here periodically so the residents will know the method, and its indications and contraindications. External cephalic version lends itself admirably to routine use by a private practicing physician.

The patient who has *uncorrectable* breech presentation and who is near term should have a careful study which will disclose the normalcy of the fetus, the adequacy of the pelvis, and the variety of breech presentation. These points can usually be determined by careful abdominal palpation and by sterile vaginal examination, but in case of doubt, roentgenographic studies should be made, both of the pelvimetry and placentographic types. If there are no contraindications to delivery through the birth canal, labor should be allowed to progress normally. *Mild* sedation, preferably with Demerol®, should be given when good progress in labor has been achieved. It is essential that the fetal heart sounds be auscultated at regular periods and with increasing frequency as the second stage of labor progresses, because there is then an increasing liability of fetal circulation embarrassment due to compression of the cord. When dilatation of the cervix is complete and the breech descends onto the perineum, the patient should be encouraged to bear down with each contraction. As soon as there is the slightest bulging of the perineum, we prefer to perform bilateral pudendal nerve block, after the method so well described and pictured by Klink,¹⁰ by injecting 4 to 6 ccs. of 1 per cent xylocaine solution at the mouth of Alcock's canal on each side. As soon as further bulging of the perineum occurs, we make a generous left mediolateral episiotomy, as this greatly aids the continuing extrusion of the breech through the vulva. In the spontaneous delivery, the passage of the shoulders and the aftercoming head should be aided so that a good mechanism can be maintained. Light inhalation anesthesia may be desired by some during the last two or three minutes of the second stage of labor, but we customarily do not use it as the patient

has been told in advance that we may push on her lower abdomen "to help the head through." An effective pudendal nerve block has proven completely adequate in such cases in our hands.

In most breech labors, following blocking of the pudendal nerves and making the episiotomy, natural delivery to the umbilicus will take place under the watchful eye of the waiting physician. At this point we begin manual support of the infant's breech and trunk, keeping the back upward while rotating the trunk gently from side to side, if need be, so as to insure easy delivery of first one and then the other scapula. We always have a scrubbed assistant, and we have him hold the trunk upward at a 45-degree angle from the horizontal plane while the operator eases out the aftercoming head. In some multiparae, as is well known to all who practice obstetrics, the entire infant may be extruded so rapidly that the obstetrician is busy supporting it and making sure that it does not fall in his lap.

In frank breech cases, particularly in primigravidae, the operator may have to assist to a considerable degree, even applying mild traction to the breech with his index fingers gently inserted in the groin on each side. This aids in guiding and helping the passage of the breech through the vulva. He then should rotate the breech so that the infant's back is uppermost, and may support and apply gentle traction on the pelvic girdle, drawing the thorax through the vulva. As soon as the lower border of the thoracic cage starts to come through the vaginal outlet we commence rotations of the trunk, drawing the thorax through the vulva as we do so. Grasping half of the pelvis in each hand, with our thumbs over the sacro-iliac region on each side, we make the rotations of the trunk and thorax—clockwise, and then counterclockwise—through an arc of a little more than 180 degrees, each time bringing one or the other of the scapulae up to the anterior midline of the outlet, as denoted by the symphysis pubis. We also apply gentle traction, and keep the infant's back upward, or nearly so. In this way, first one, and then the other, of the scapulae are brought under the subpubic arch, and the occurrence of a nuchal arm is nearly impossible as the infant's arms, because of the thorax rotations, are kept moving about freely *in utero* beside its head up until the moment of their delivery.

We usually deliver the head by the applica-

tion of gentle suprafundic pressure made with the palm and heel of the hand, and not with the finger tips or knuckled fist. If the head does not descend readily to the pelvic floor with this pressure, and if it does not then come through the vulva without undue traction on the trunk or pectoral girdle, Piper forceps are applied at once. They are always kept sterile and in readiness in every breech delivery so that there is no question as to their immediate availability. They must be applied gently to each side of the infant's head, and we feel that this can best be done by putting the tip of the left blade inside the vaginal orifice and then moving its handle over against the under surface of the patient's flexed and draped left thigh. By guiding the tip of the blade gently around the side of the head with his left hand, and gradually swinging the handle of the blade through a 90° arc in the horizontal plane with his right hand, the operator can usually apply the left blade without trauma or difficulty. The same principle is then used with the opposite hands in applying the right blade. Pudendal nerve block anesthesia has proven adequate for forceps delivery of the after-coming head in most cases in our hands.

The head must be manipulated so that it enters the pelvic canal and comes down through it and delivers. If it cannot be readily brought down through the canal with suprapubic pressure alone, then the operator should gently insert his index finger in the infant's mouth and also exert light traction. With an assistant holding the infant the operator can use one hand to exert the pressure above and the other for traction below. This dual maneuver will generally bring the head down low enough in the canal to permit the safe application of Piper forceps. When the head is high and not even engaged, it is no safer to apply forceps (to the aftercoming head) than when they are applied to an unengaged head in cephalic presentation; the head should at least be brought down to about the mid-pelvic level before forceps are applied.

Single and double footling breeches deliver more readily and spontaneously than do frank breeches, but they carry higher incidences of prolapsed and compressed umbilical cord. One hopes, in single and double footling breech cases, that labor will progress to or nearly to full dilatation of the cervix before the membranes rupture, since following this event a leg frequently prolapses. Such an occurrence earlier in labor is undesirable since it

decreases the size of the breech and thus permits it to pass through an incompletely dilated cervix, which may not dilate nor prepare the cervix adequately for easy passage of the aftercoming head. Rectal examinations during labor, in such cases, must be very infrequently and gently performed so as not to hasten membrane rupture.

In those patients having adequately large pelves and full dilatation of the cervix, in which there is inadequately strong labor in the second stage, or in primigravidae having resistant soft tissues and relatively large infants, or when there is evidence of fetal distress before the breech has appreciably bulged the perineum, *breech extraction* should be performed. Because breech extraction carries from four to six times the rate of fetal mortality as does spontaneous or aided breech delivery, it must be executed with consummate gentleness and skill. In those instances when there is frank breech presentation of an overly large infant, and there is only an average sized pelvis, particularly if labor has been prolonged and difficult and adequate progress is not being made, the idea of pelvic delivery had best be abandoned, section being performed instead. It is true that at section it is difficult to get the low, wedged-in breech back up out of the pelvis, but we have always been able to do so through a *longitudinal* (Kroenig) incision in the lower uterine segment without too much difficulty.

In performing extraction of the frank type of breech, we again use pudendal nerve block anesthesia, and then make a liberal left mediolateral episiotomy and quickly clamp and ligate the major bleeding points in it. We grasp the breech and pull it through the vulva until about half of the thighs are visible, if this is possible. Next we perform a Pinard maneuver on each leg in turn, exercising gentleness and slow caution so as not to further extend our episiotomy or to otherwise lacerate the vagina. We next place a dry towel around the pelvic girdle and, grasping one half of the pelvis in each hand and keeping the back generally up, we apply traction and commence the alternate 180° rotations of the trunk and thorax as described above. Sometimes the scapula will lodge just inside the base of the symphysis and not pass beneath it. We then gently insert an index finger above the scapula and deliver it and the shoulder from under the arch. Then the thorax is rotated 180° and the other scapula-and-shoulder is brought up under the

subpubic arch and delivered. The head in such a case, unless it comes out easily with suprapubic pressure, is delivered by Piper's forceps.

In a difficult breech extraction, we give the pudendal block anesthesia and make a wide mediolateral episiotomy, and if the breech fits snugly and cannot readily be brought down we prefer to supplement at once with ether and oxygen anesthesia, providing it is not contraindicated by reason of a full stomach or respiratory infection. If a competent inhalation anesthetist is not available, and there is a real need for uterine as well as soft-tissue relaxation, we then resort to spinal anesthesia and give the dose ordinarily used for section, such as 70 mg. of procaine injected through the third interspace with the patient lying on her side. Such ether or spinal anesthesia is essential in difficult extractions when there has been a long and difficult labor and there is reason to suspect the presence of a hypertonic uterus and possibly even a constriction ring. In all other cases we prefer pudendal nerve block anesthesia, which rarely may have to be supplemented for a few minutes with light nitrous oxide-oxygen anesthesia. We like to use pudendal nerve block principally because it permits the uterus to remain in full and unattenuated labor, and thus the percentage of spontaneous and "easy assist" breech deliveries remains at a maximally high (and, as the statistics indicate, maximally safe) figure on our service. We have the definite belief that the still strongly laboring uterus helps appreciably in expressing the aftercoming head, and that it is the wide use of pudendal nerve block anesthesia which has decreased our incidences of extraction and forceps deliveries.

The primary objective of Cesarean section in the management of breech presentation is to assure the birth of a living infant. Goethals¹¹ summarized 159 Cesarean sections done for breech delivery on 154 patients, five of whom were subjected to two sections, each with breech presentation. Aside from those common complications requiring section regardless of cephalic or breech presentation (e.g. diabetes, marked polyhydramnios, placenta previa, prolapse of cord, severe pre-eclampsia), he found the paramount indications for section to be: estimated fetopelvic disproportion, 71.7 per cent; elderly primiparity, 6.7 per cent; estimated oversize fetus, 5.4 per cent, obstruction of birth canal (ovarian cyst, uterine myomata, bicornate uterus) 2.7 per cent; and

miscellaneous (e.g. previous myomectomy, prolonged labor, fetal distress, and failed pelvic delivery), 13.5 per cent. The incidence of breech presenting infants delivered by section at the Boston Lying-in Hospital prior to 1940 was 6 per cent, whereas since that date it has been 11.2 per cent; since 1940 the corrected fetal and neonatal mortality rate for breeches delivered through the vagina was 2.6 per cent, while for those delivered by section it was 2.3 per cent, all of which is a marked improvement in fetal survival over that of the period prior to 1940. X-ray pelvimetry, plus relatively accurate estimation of fetal size, permits a more knowing and valid anticipation of fetopelvic disproportion, and thus the decision as to the necessity of section is more readily reached; section thus resorted to produces an increased fetal survival.

A reduction of the fetal mortality in breech delivery to a corrected incidence of 2.5 per cent or less throughout our country is an important and attainable goal towards which obstetricians should strive.

Summary

1. Breech delivery carries a four-times-greater fetal mortality rate than does cephalic delivery, and also a four-times-greater rate of maternal morbidity. This is true of the country as a whole.

2. Breech delivery can be obviated in all but about one-fourth of the cases by routine external cephalic version of all breech presenting fetuses found, by a regular program for detection, at twenty-eight to thirty-four weeks of pregnancy. The corrected fetal mortality, in skilled hands and under such a plan, can be reduced to 1.5 per cent or lower.

3. External cephalic version, when gently performed, by knowing and careful physicians, carries no detectable incidence of fetal or maternal trauma or loss. It is a relatively easy maneuver, and can readily be learned from one experienced in its performance.

4. Breech delivery is best accomplished spontaneously, or by a single "assist," under pudendal nerve block anesthesia through a wide mediolateral episiotomy, and cases so delivered carry the lowest rates of fetal mortality, and fetal and maternal morbidity.

5. When a difficult frank breech extraction is to be done, ether anesthesia may be indicated, and

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Shoulder-Hand Syndrome

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THE SHOULDER-HAND syndrome is characterized by a painful shoulder, stiffness, swelling and pain in the hand and fingers, as a result of a reflexed neurovascular dystrophy following diseases of the thorax, head and neck. This condition may be seen after myocardial infarction.

segmental sensory loss is noted. The tendon reflexes are intact, early.

Mechanism

The mechanism of production of the shoulder-hand syndrome is on a reflex basis. The afferent

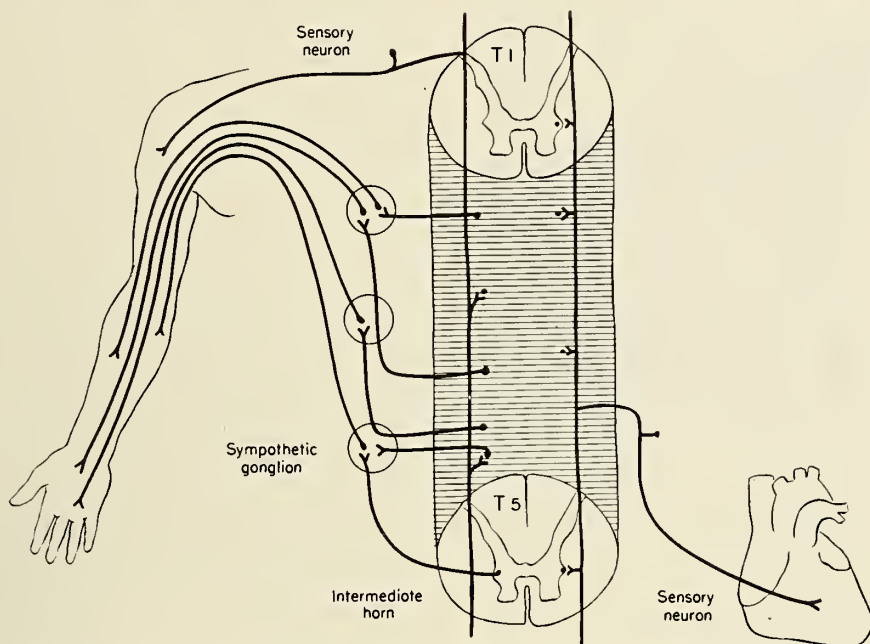


Fig. 1. A working outline of reflex pathways resulting in shoulder-hand syndrome.

At first, the pain in the extremity is accompanied by stiffness and swelling, eventually there may be atrophy with flexion deformities of the fingers and contractures with osteoporosis in some cases.

The shoulder-hand syndrome may follow myocardial infarction. It is usually not present in the acute phase, appearing two to three weeks after the infarction. Increasing stiffness of the upper extremity with pain in the shoulder and the hand and swellings of the hand are noted. This is followed by increasing disability, if something is not done to help cure the disease. No

stimuli coming from the injured or diseased area in the thorax, or neck or the upper limbs activate the internuncial pool in the spinal cord. This then spreads to the anterolateral column stimulating sympathetic cell bodies as well as the cells in the anterior horn. The preganglionic fibers in turn activate the postganglionic fibers supplying the blood vessels of the extremity, resulting in a series of abnormalities, namely, stiffness of joints, swelling, and aching and burning pain in the hands and fingers (Fig. 1). It is important to remember that such reflex dystrophy may occur not only as a result of myocardial disease, but also as a result of other diseases in the chest and the mediastinum, as well as painful conditions in the

From Wayne State University Neurosurgical Services, Grace and Memorial Hospitals, Detroit.
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upper extremity itself. The mechanisms for the causation of the neurovascular dystrophy and the reflex arc aiding in its causation are available through afferent discharges from the painful area

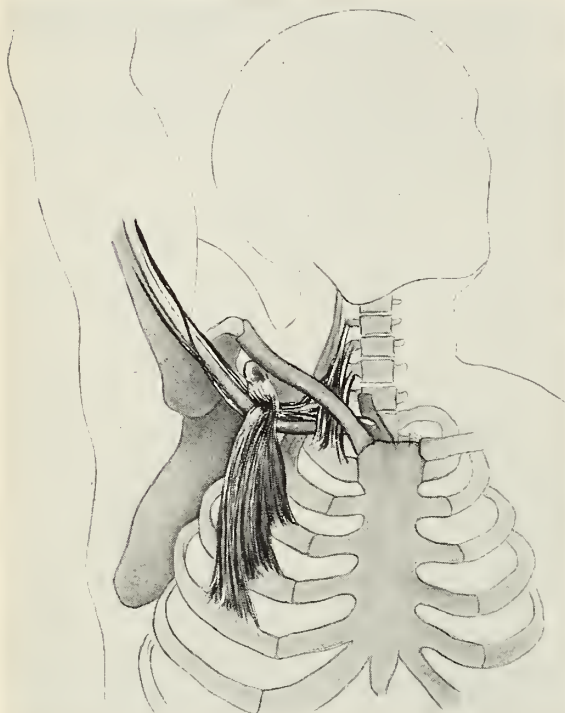


Fig. 2. This diagram shows the mechanism of compression of the neurovascular structures (subclavian vessels and the brachial plexus) by the anterior scalene and the pectoralis minor muscles, as well as costoclavicular compression.

into the internuncial pool in the spinal cord with sympathetic discharges and painful swelling with aching and burning.

Differential Diagnosis

The differential diagnosis of shoulder-hand syndrome includes a consideration of many of the conditions that result in a painful state in the upper extremity, that is, in the shoulder, hand, or both. These include cervical ruptured or protruded disc, Sudeck's atrophy or painful osteoporosis with bone atrophy, cervical rib and anterior scalene syndrome, costoclavicular syndrome, hyperabduction or subcoracoid syndrome, or pectoralis minor syndrome, causalgia due to nerve injury and local diseases in the upper extremity and the spine, including bursitis and osteoarthritis of the spine and the extremity.

The cervical rib syndrome is usually seen in the female patient in more than 75 per cent of the cases. Only a quarter of those with cervical rib or long transverse processes of the seventh cervical vertebra have symptoms. There may be sensory, muscular and vascular abnormalities with the pain usually from the elbow down. Aching and burning and, at times, shooting pain may be complained of, with paresthesias in the fingers. Often the ulnar portion of the hand is more involved. The pain is usually made worse by pressure in the supraclavicular area in the region of the emergence of the lower portions of the brachial plexus. Hyperesthesias and anesthetics associated with pain may be noted. Wasting of muscles, particularly in the thenar eminence is frequent in the untreated cases of long standing. At times there may be unusual pulsations in the supraclavicular area because of an upward displacement of the subclavian artery due to the cervical rib. Depending upon whether or not the brachial plexus is of the pre-fixed or of the postfixed variety, there may be more involvement of the median distribution in the former group as compared with the latter group in which the ulnar distribution is more frequently involved. At times there may be a feeling of coldness with pallor or cyanosis in the hand. Occasionally there may be intermittent claudication with the extremity red, swollen and livid. The diagnosis of the condition is based on the presence of a cervical rib shown by x-ray and the symptoms. When the head is turned toward the affected side and posteriorly, there may be a loss of the radial pulse.

The anterior scalene syndrome is caused by compression of the lower brachial roots forming the brachial plexus and/or the subclavian artery by this muscle. A hypertrophy of the anterior scalene muscle may compress the brachial plexus and the subclavian artery. An obliteration of the pulse may occur on turning the head toward or away from the affected side or there may be increase in the symptoms and signs by these maneuvers. There may be tenderness of the muscle on compression and relief of the complaints by elevating the shoulder girdle. Injection of procaine into the belly of the muscle may help relieve the condition. In some cases, the vascular symptoms of a tight anterior scalene may be quite serious with marked color changes in the hand, in some even a gangrene of the distal portion of the extremity may be noted. A swollen hand

with shiny skin of the fingers and hand, difficulty in flexion and extension of the fingers, pain in the extremity, may be in part due to the compression of the vessel and nerves and in part due to reflex vasomotor abnormalities from activation of the internuncial neurons in the spinal cord and the sympathetic pathways (Fig. 2).

The subcoracoid or pectoralis minor syndrome or hyperabduction syndrome is due as the name suggests it, to hyperabduction either in work or sleep with neurovascular changes associated with pain in the hand or shoulder, at times Raynaud's phenomenon, paresthesias involving the entire hand. The kinking of the subclavian vessels and the brachial plexus by the edge of the pectoralis minor results in the neurovascular abnormalities (Fig. 2).

The costoclavicular syndrome is caused by a compression of the subclavian artery and the brachial plexus between the first rib and the clavicle. An abnormal sagging of the shoulders with a high first thoracic rib may result in this syndrome. Hyperextension of the neck or backward pulling of the shoulders may compress the brachial plexus and the subclavian vessels between the clavicle and the rib. The diagnosis may be made on the basis of these maneuvers and the presence of abnormal x-ray findings suggesting such a condition.

Causalgia due to partial injury to one of the nerves in the upper extremity is associated with burning, aching, crushing feeling, paroxysms of shooting pains. In instances of amputation neuroma, there may be pains in a phantom limb, which according to the patient, is in a fixed, immovable and cramped position. Causalgia associated with partial injury to the nerves may be associated with a constant burning, aching pain, with severe exacerbations on physical and emotional stress. The hand may be cyanotic and wet; in other instances, it may be dry and scaly. More frequently, it is cold and wet with perspiration. Eventual atrophic changes of the nails, and a thin, shiny, hairless epidermis may be seen. In many instances a beginning causalgic state may improve early after its inception, but in others the condition continues, to become an unbearable state. Sympathectomy has been of value in this condition.

Sudeck's atrophy may often follow fractures of

bones and in some cases insignificant injuries to an extremity. Spotty decalcification of the bone with vasomotor disturbances and great pain in the extremity are the diagnostic features of the condition. Early there may be a swelling and discoloration and intense pain with local vasodilation. Later, the hyperemia may be followed by vaso-spasm and a glossy skin with edema and cyanosis in the dependent position. Sympathectomy is valuable in management.

A cervical disc may or may not be associated with a history of trauma. Evidences of focal sensory changes in the upper extremity and in some cases with loss of biceps and/or triceps tendon reflexes are noted. The diagnosis may be based upon the history of pain in the neck and radiation into the upper limb. The movements of the neck may cause radiations of pain in the affected limb. The use of a cervical myelogram and the presence of narrowed cervical intervertebral spaces are valuable in diagnosis.

Diagnosis

The diagnosis of the condition is based on a careful neurologic examination following a meticulous history. The use of x-rays of the cervical spine and the extremities and myelography may be of help. In some cases, the possibility of two conditions occurring simultaneously should be kept in mind. This is particularly true among those with hypertrophic osteoarthritis of the cervical spine who may also have a myocardial infarction followed by a shoulder-hand syndrome.

Treatment

The treatment of the patient with shoulder-hand syndrome is by the use of sympathetic blocks, physiotherapy, massage, active and passive movements of the extremity as well as the development of a healthy viewpoint toward one's disability. Since many of these patients are in the older age group, the last-mentioned factor, that of the emotional instability toward one's disability, is extremely important. To help overcome this is an important part of the treatment of such cases. Where definite disease entities have been found which may be treated by special measures such as sympathectomy, laminectomy, scalenotomy, et cetera, these should be carried out.

Editorial

CHILD WELFARE ISSUE

This issue of *THE JOURNAL* is sponsored by the Child Welfare Committee of the Michigan State Medical Society. The term "Child Welfare" bears an unfortunate connotation. "Welfare," to most people, suggests social need and charity rather than the physical and emotional well-being of all. There are those who may feel that this issue, dealing with children, is so restrictive as not to concern them. We all, though, are concerned with standard of living, and recently our standard has risen greatly because of the improvement in child health.

The health of no group is more before the public's eye than that of children. The medical profession gets credit when there are advances—as in perinatal morbidity, with the reduction of retrolental blindness by limiting use of oxygen, or with survival of infants with erythroblastosis by replacement transfusions. Contrariwise, we are criticized, usually vehemently, when there is some breach in child care. Our critics do not think of us as individual doctors but as a professional group. We are praised or dammed as a group. By force, then, all of us, must be deeply concerned with "child welfare."

Selection of an appropriate cover for a journal is always a problem. I felt the little princess we chose rather breath-taking; you can't help but look at her twice. Regardless of our critics and standards of living and medicine, her attraction to us demonstrates the instinctive love of children we all have.

The child is the daughter of John Cook, and the picture was taken by George Jennings, both staff members of the State Department of Health. Choosing this picture was appropriate and manifests again the constant co-operation of assistance given us by the State Department of Health.

Another cover was suggested, depicting "Operation Armor," symbolizing the State Medical Society's campaign to get all susceptible persons vaccinated against polio, regardless of age. Here the borderline between child and adult welfare breaks down. The articles on polio, important to us all, emphasize that we each, by every possible

means of education, must not only "get the vaccine to the patient, but get the patients to the vaccine."

How many of our own children needed glasses before we doctors, the children's fathers, were aware of it? The vision screening tests performed in schools throughout Michigan have revealed many preventable or correctable eye conditions. Might our own vision today have been better had our eyes been tested when we were younger? What should we be doing in our offices to check vision?

And how many inquiries do we have each year about adoptions? Did you know that in this state there has been no formal training of medical or law students in the medical, legal, and ethical factors of adoptions? Yet our patients expect us to be thoroughly conversant with at least the medical phases of adoption. Are you?

Other articles summarize some of the interests explored and conclusions reached by various members of the Child Welfare Committee and of others who have concentrated on child care.

The Committee is grateful to the State Medical Society for the opportunity of bringing these to your attention, and we appreciate the time and effort of those who have contributed to this issue.

ROBERT M. HEAVENRICH, M.D.

PROPOSED NATIONAL LEGISLATION

The President's Health Legislation program has not yet been outlined to Congress but sufficient has been indicated to give us a good idea of what to look for. The Civil Service Commission has a program left over from the 84th Congress providing hospital and medical services for more than two million workers and their dependents. Last year, the Congress almost agreed on a plan which would give very liberal terms, the government paying the first \$25.00 of the premium. It proposed that payroll deductions be authorized. This last item was one reason the bill did not pass. A commission was authorized to study its feasibility. Government feared the workability in its

(Turn to Page 358)

Kids Are Important

In matters of Health, nothing has comparable public appeal to the physical vicissitudes of children.

You and I know that the child is probably as indestructible a human as any in existence, and that, barring accidents, he's going to live longer than any of the folks who worry about him.

On the other hand, the old adage "as the twig is bent, the tree is inclined" is perhaps truer in respect to physical and mental health than it is to any other part of the child's life, insofar as his future well-being and success are concerned.

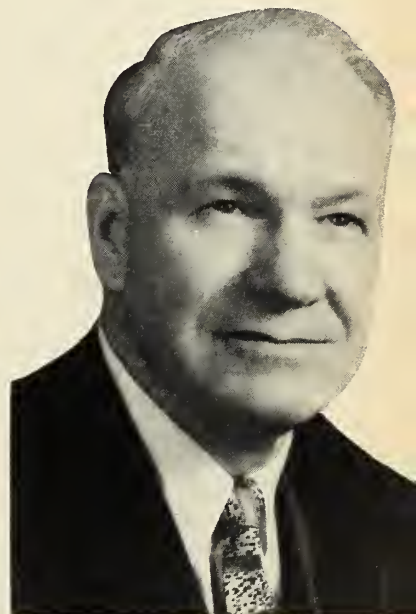
Consequently, it behooves us, as doctors and as medical societies, both from the standpoint of good preventive medicine and good public relations, to put increasingly strong emphasis on the health welfare of children.

And that is what we are doing. Our all-inclusive immunization campaign called "Operation Armor," our Rheumatic Fever Control program, the statewide studies of sight and hearing in the schools, the programs for crippled and afflicted children, the child guidance clinics—all are manifestations of the medical profession's interest in children.

It strikes me that there is another reason why "kids are important" and why we have a duty, not only as doctors but as citizens, to do our part in seeing that America's children grow straight and tall and sound. It is that our national defense, the future progress of our country, the maintenance of a straight-thinking electorate, indeed, the future of our profession all depend on the "twig" that is so easily bent.

It's quite a responsibility.

President's



Message

Arch Walls M.D.

President, Michigan State Medical Society

own affairs; however, in formulating income tax regulations, they had no hesitation to impose withholding duties on industry.

The plans being considered for medical and hospital "insurance" for government employes seems to be favorable to the Blue Cross and Blue Shield methods. A uniformity of contract is favored by some, but the Blue Shield can overcome the differences in its seventy-four plans by using its own reinsurance plans to cover items not included in some plans. The Blue Shield plans have the advantage of really representing the requirements and facilities to which the people and doctors of the section are accustomed. General Motors has worked out this problem very satisfactorily.

The President has been concerned with more services for uninsured and uninsurable persons. There are now about 14,000,000 persons over sixty-five who are retired or are being retired—some with social security but most with inadequate resources. Of these, the government has grouped four service programs in a special category: Aid to Blind, Old Age Assistance, Dependent Children, and Disabled.

From time immemorial, the state has had the responsibility of feedings, housing and clothing the indigent. Niggardly medical care also has been provided to the "medically indigent." The Federal Government has borne part of this cost. It now provides matching funds to the states. For several years, the four groups mentioned have been included, but the last Congress in an effort to improve care, authorized a special grant of \$3.00 for each adult and half that amount for each child under nineteen with matching funds from the states, to give additional medical aid to the four classifications. The Michigan Department of Social Welfare is considering using the children's share for dental care, and the adult share for increasing hospital services.

Indigent Care

There are many people unemployed, unable to work, or just unemployable who must have health care. These are part of the President's candidates for "reinsurance." Our Michigan Welfare department is paying those on its rolls \$3.00 a month for miscellaneous medical care and a limited allowance for doctor's bills, provided they get a doctor's signature on their form each month. The patient is supposed to pay the doctor, and more

are now doing so; however, this whole program is cumbersome.

One county in Michigan, some years ago, offered to contract for the necessary care of all the indigents for the exact amount they were costing the welfare agencies, the county society agreeing to pay the doctors. It was believed that complete care could be given for the current costs. That plan was blocked by rulings that the Welfare Department must not pay direct for health care.

Another scheme suggested was a "cost-plus" basis—the Department to authorize care and pay for it through an intermediary (MMS). That seemed most logical—government has the responsibility of health care for these people—the plan could work. It has worked in several of our states in care of service-connected disabilities of our veterans. The same program is now in operation throughout the United States for the dependents of military service personnel.

Blue Cross and Blue Shield over the nation have indicated their ability and willingness to care for the uninsurable and the worthy wards of the Government. The last groups mentioned herein are historically admitted to be the responsibility of government. Available sponsors have always been the charity hospitals and the sympathizing doctors. The voluntary health service plans have pointed the way, and government should accept its responsibility. So far, the only cost to the government has been administrative, because we have used our own set-up at cost. Government has suggested subsidies to cover the plans we have been discussing. The Blue plans do not want any subsidy but would be willing to work on a "cost-plus" arrangement.

Jenkins-Keogh

Another piece of national legislation is the renewed Jenkins-Keogh bills, again numbered 9 and 10. They have been modified but in general provide for the assigning of part of income, up to a limit, which can be invested in approved methods to build up a retirement program, to be tax-free until the funds are drawn upon for retirement purposes, at which time they will be taxable in a reduced amount. The bills propose to allow self-employed men the same tax-exempt formula now being used by industry to establish endowments for its employed persons. This bill now has the support of the American Bar Association and hopefully will be remembered by our

representatives when the time of action comes. Last year, it might have been enacted. Let's see that it is enacted this term.

Murray-Dingell

Congressman Dingell, son of our former representative from Michigan, has joined with Senator Murray so that in each House a bill much like our old friend of fourteen years ago has been introduced. Many items of the original bill have been enacted piecemeal during the years. We now have education and health personnel; medical research; Hill-Burton hospital construction (expanded); aid to rural and shortage areas; state grants (matching) for health work; grants for national health; grants for child welfare.

The Dingell-Murray scheme is similar to social security, establishing a system of health insurance requiring workers to contribute 1.5 per cent of earnings up to \$90 a year, matched by employers. Eligible workers and their families would receive preventive and diagnostic examinations, x-ray and laboratory, hospitalization up to ninety days, more expensive drugs, appliances, glasses. This practically covers the field for all employed persons.

PREPAYMENT

Great proportions of our members are happy in the service we have been able to render our patients because of our Michigan Medical Service. Too many have accepted returns for services to patients, have been critical of the amounts of payments, and in general have critized "that insurance company." We have heard it for years. Unfortunately, many do not remember the time before "prepayment." The man who collected over 75 per cent considered himself a good businessman. The effort and time consumed in collecting amounted to a staggering amount. That is all gone with Michigan Medical Service. No collecting expense, only one detailed report necessary, and a rather prompt check. At its inception Blue Shield had its most important purpose to guarantee health services to a large proportion of our patients who were primarily in the lower income bracket, and to whom a trip to the hospital was a calamity. The hospital, the doctor, the grocer, all had to wait. Unfortunately, too many of us do not respect Blue Shield as our own child, our best friend, our guard in former years against socialized medicine of the Wagner-Murray-Dingell type.

A new Murray-Dingell bill is now in the hopper, but our watchful medical leaders are much more concerned with a threat to the time-honored system of private practice of medicine. Some attempts have been made to put groups of the profession on a salary or capitation basis, but not too successfully. The older doctors in Detroit remember the consternation when the Ford Hospital instituted its work through salaried doctors. Some remember the Ross-Loos Clinic of California. The Kaiser Permanente NTI plan caused concern and much readjustment in California. HIP in New York City uses capitation.

Because Michigan has very few groups or clinics, and not much experience with that type of practice, we were taken aback with the announcement of the Community Health Association, and its announced intention of employing doctors on salary, for the care of their insured people. Should the plan grow and need large numbers of doctors, that would place our profession, in large measure, in the position of contract practice, the union leader being the dictator of care and loyalty. The CHA Board has stated its intent never to interfere in the professional services. How long will that promise last when the employer is the creature of a most powerful pressure group?

The Council of the Michigan State Medical Society believes this threat to private practice can be countered by two concerted efforts. First, Michigan Medical Service is offering more complete coverage as a rider. The service can be rendered at a surprisingly small price, but it must be paid for. Those services cannot be given free. Second, it will probably be necessary for all of our members to accept the offerings of Michigan Medical Service and meticulously not overcharge the under-income-level persons. Savings on collection costs and loss from unpaid bills will probably amply overbalance the contemplated overcharges in the long run.

The most important advantage will be the protection of our right to practice medicine as we have in the past—placing our own peers over us instead of a government hierarchy, or a strong labor group.

Too much is at stake to take chances—all of us must co-operate.

WHAT MAKES BLUE SHIELD DIFFERENT?

One frequently hears doctors ask, "Isn't Blue Shield just 'another insurance company'?" This question usually comes from a member of the generation of new doctors who have come into practice since the early '40's, and who know little of the desperate challenge that gave rise to the Blue Shield idea and the hard work with which its accoucheurs gave it birth.

Blue Shield represents a vast and triumphant effort on the part of American medicine to prove to the people of the United States that, with their help, their doctors can solve urgent problems of medical economics without governmental interference or dictation. Blue Shield was created at a time when the insurance industry questioned the actuarial feasibility of voluntary medical care insurance on any large scale, and even many doctors feared that a voluntary program would inevitably lead to a compulsory health insurance system under government auspices.

Blue Shield has little in common with commercial accident and health insurance beyond the fact that it utilizes actuarial principles. Where the insurance company underwrites selected groups to produce a profit, Blue Shield, reflecting the service ideals of the medical profession, makes its services available to the entire community, at rates based on the needs and experience of the community—including most particularly those people in the low income groups who most need medical prepayment protection.

Where commercial insurance companies offer cash allowances which may or may not have any relation to the doctor's normal charge for his services, Blue Shield's schedules of payment are negotiated and approved by the local medical profession. In most areas Blue Shield benefits take the form of fully paid professional services, through the co-operation of the "participating physicians." Even where "service benefits" are not provided by formal agreement of the doctors, Plan schedules generally attempt to approximate the normal charges of the local physicians for services rendered people in the lower income brackets, and the local physicians frequently accept these fees as full payment.

Blue Shield Plans are distinguished by non-profit operation, which means that their only purpose is service to the people and their doctors.

Non-profit operation also means that all the funds contributed by the subscribers are available for payment of benefits, with a minimum retained for actual operating costs and reserves for future claims.

Over and above all requirements of state law, Blue Shield Plans are required to maintain strict "membership standards" in order to use the name and symbol "Blue Shield." These standards provide that the Plan must have the continuous approval of the local medical society; must render an annual report to the society; and must secure the formal participation of at least 51 per cent of all the physicians in the Plan area.

Blue Shield utilizes insurance principles, but, because of the participation of the great majority of American physicians, it is able to transcend the limits of insurance—to become a true community service on behalf of America's physicians.

DEATHS BALANCE BIRTHS

Over the past thirty years, extensive maternal mortality studies have been carried on in Michigan. Due at least in part to the application of information obtained from these studies, the maternal mortality rate in Michigan has dropped 92.3 per cent. However, during the same period, deaths of newborn infants have declined only 55.8 per cent.

It is probable that one reason for this disproportionate decline in mortality rates is a lack of information and research regarding the exact cause of many perinatal deaths. Although definitions vary somewhat, the most commonly accepted meaning of the term "perinatal mortality" relates to the total fetal deaths from twenty weeks or more gestation and newborn deaths within the first seven days of life. If these deaths are to be reduced significantly, it is necessary to obtain complete and reliable information regarding the pregnancy, delivery, condition of the infant at birth, and treatment and care of both mother and child.

A number of Michigan physicians, concerned about fetal wastage as well as handicapping conditions in surviving infants, have organized committees to study perinatal deaths and factors associated with them. Included among the leaders in organizing such committees are physicians in Wayne County, Grand Rapids, Saginaw and Lansing. They realize that the perinatal period offers

one of the most fruitful areas for research and education, not only in terms of preventing deaths and disability but in saving taxpayers' money. A factor which causes the death of one child may cause a seriously handicapping condition in another who survives. Preventing such conditions from developing must certainly be considered as a primary purpose of these perinatal studies.

A perinatal mortality study committee usually includes general practitioners, obstetricians, pediatricians, pathologists, anesthesiologists and public health workers. Accurate and complete information on birth and death certificates and hospital records is the basic requisite for a valid study. In this, *all* physicians caring for mothers and newborn infants can co-operate. A uniform procedure for reporting data throughout the state is essential because it makes valid comparison possible and provides statistics of significance and value.

Assistance with the planning of such studies and standard forms for the tabulation of data and statistical analysis will be provided by the Michigan Department of Health upon request.

The need for such studies is highlighted by the fact that prematurity is the leading cause of death among newborn infants. In 1954, physicians stated on death certificates of infants under twenty-eight days of life that prematurity was the sole cause of 36 per cent of the deaths and an associated cause in an additional 26 per cent. It would seem apparent, then, that emphasis should be placed on the prevention of prematurity. Factors to be considered in such prevention are early and adequate prenatal care and the avoidance of surgical or medical induction of labor until maturity has been assured by radiologic or clinical means. When necessary, gestation can often be prolonged by judicious sedation and rest.

Of course, prematurity is often inescapable; some infants refuse to delay their arrival into the world despite the best efforts of all concerned. In such cases, death can often be prevented by thorough preparation before delivery for immediate care of the expected premature infant. This, of course, requires adequate hospital equipment and facilities, as well as highly competent medical and nursing care. In addition, instruction of the mother regarding the care of the infant in the home is extremely important. Many physicians routinely request home visits by public health

nurses for premature infants and are convinced of their value in saving lives.

Michigan ranks high among the states in terms of quality of medical care, hospital beds, public health services and economic status. It is also fortunate in having so many physicians who devote much of their time and energy to public and community health. Yet, by a more effective co-ordination of these forces, a higher level of health for Michigan children can be attained.

This would include: greater participation by physicians in lay education regarding child health; research and studies of fetal wastage and handicapping conditions in children, both congenial and acquired; further improvement in hospital care, both in nursery facilities and pediatric departments; and better utilization by practicing physicians of the services and materials provided by the state and local health departments.

Certainly, there is still a great deal of room for improvement in further reducing perinatal deaths in Michigan. By establishing committees to investigate all known factors pertaining to perinatal deaths and by analyzing probably preventable factors which lead directly to these deaths or conditions contributing to death, it is not unreasonable to suppose that a significant reduction can be achieved.

GOLDIE B. CORNELIUSON, M.D., Director
Division of Maternal and Child Health
Michigan Department of Health

Careful perimetric studies are by far the best method of localizing occipital lobe tumors.

* * *

Significant alterations in the orbital veins, whether congenital or the results of pathological degeneration of the vascular walls, neoplasms or trauma, give rise to venous aneurysms.

* * *

The radioactive isotopes are among the more promising of the newer techniques for determining the location and demarcation of intracranial neoplasms.

* * *

There has been neither morbidity nor mortality traced to action of the radioactive dyes in tests for brain tumor localization.

* * *

Early brain tumors are often mistaken for chronic indigestion, migraine, mental illness, hypochondria, or just plain laziness.

* * *

Any attitude of hopelessness in regard to brain surgery and its results is a distinct anachronism. Operative mortality rates have been greatly reduced and many patients permanently benefit from modern operative procedures.

L. Fernald Foster, M.D.

Servant and Director of Medicine

L. Fernald Foster, M.D., Bay City, will devote his full time to the carrying out of duties of his two offices—President of Michigan Medical Service and Secretary of the Michigan State Medical Society as Medical Executive Administrator.

Dr. Foster has been a member of the Board of Directors of Michigan Medical Service since its inception in 1939. For the past twenty years, he has been Secretary of the MSMS.

The list of Dr. Foster's activities in behalf of the medical profession seems endless. Here are a few highlights:

In December 1956, he resigned as Secretary of the Bay County Medical Society after a tenure in that office of thirty-six years. This tenure was broken only by a year of service to that organization in the office of President, during which time the Secretary's books never left his office. Recognized as an outstanding pediatrician in Bay City, he held at some time, during his years of practice there, every office of importance in the hospitals concerned with the medical staff or his specialty. At the same time, he served as a consultant in pediatrics in surrounding community hospitals.

His impact has been felt most, in spite of his outstanding record in his hometown, on the state and national levels. Known for many years as the man who was always aware of what was going to happen before it happened in medical society affairs, a plan to make him "President-for-a-Day" was successfully kept secret from him until the resolution was passed by the House of Delegates in 1954. He had deliberately refused any attempt to put his name up for the presidency on many previous occasions and had likewise refused to accept a chance to become a trustee of the American Medical Association.

He was told at that time: "With your ability there isn't any doubt in our minds that you'll be

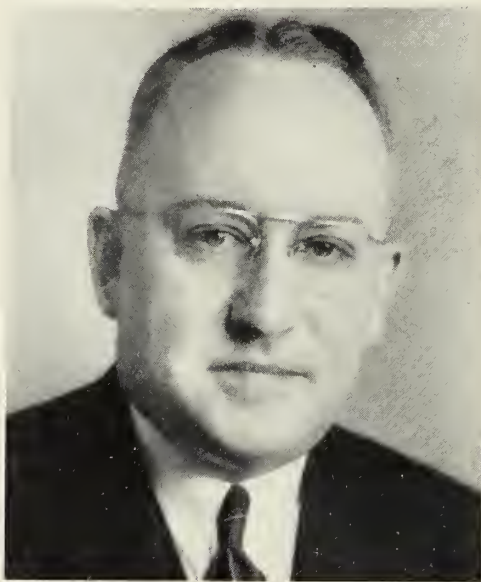
President of AMA." Said Foster: "But I don't want to be President."

His work with the Michigan State Medical Society includes activity in connection with nearly every committee and project of that organization and so are too numerous to mention. However, with his understanding of the medical profession as a springboard, he has inaugurated many a program and project which are now accepted as standard parts of the warp and woof of health services.

A founder of Michigan Medical Service, he is also a founder of the Michigan Heart Association, serving as its first Secretary and its present Vice President. He started the Michigan Rheumatic Fever Control Program when he was serving as a member of the Board of Directors of the Michigan Society for Crippled Children and Adults. He aided in the organization of the National Conference of Medical Service and served

as its President. As Chairman of the Board of Directors of the Cooperative Medical Advertising Bureau of the AMA, he was influential in the establishment of the present, independent State Medical Journal Advertising Bureau, upon which he still serves as a member of the Board of Directors and Chairman of the Advertising Committee. With MSMS Past-President Andrew S. Brunk, M.D., he formed the Conference of Presidents and other Officers of State Medical Societies; and the list goes on and on.

Nor has his activity been limited to general phases of organized medicine. Although a front-line favorite of the general practitioner, he is a specialist. Following graduation from Lafayette College in Easton, Pennsylvania, with a Ph.B. degree, he received his medical degree from the University of Pennsylvania School of Medicine in 1919 and interned at the Presbyterian Hospital and Childrens Hospital in Philadelphia. He took



his residency in pediatrics at the Presbyterian Hospital and was Chief Resident of Childrens Hospital there. He took postgraduate work at Washington and Johns Hopkins Universities and became successively diplomate of the National Board of Medical Examiners, diplomate of the American Board of Pediatrics and member of the American Academy of Pediatrics.

Besides his wide activity in medical circles, he is a member of Rotary and several other fraternal organizations including the American Legion, the latter following his military record as a member of the Medical Reserve Corps in World War I.

Although his chief love is medical organization, his inquiring mind became intrigued with fire fighting. Today, he is an authority on fire-fighting equipment and installations, and his persuasive personality as a speaker has resulted in improvements in fire department equipment, not only in Bay City, but in several other Michigan communities.

He sees no disparity between his interest in medical organization and fire fighting, probably because he's put out many a fire that threatened his chosen profession and certainly has built a fire under many a slow-moving colleague when action was urgently needed.

As he goes into full-time service in MMS and MSMS, you can expect to see the same intensified, extensive programs take form that have characterized his past performance.

RUBELLA IN PREGNANCY

(Continued from Page 341)

stillbirths of 6 to 10 per cent, where maternal rubella occurs in the first sixteen weeks of gestation.

3. The effectiveness of gamma globulin in prophylaxis is questionable.

4. Many considerations deter the physician who considers therapeutic abortion.

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MANAGEMENT OF BREECH PRESENTATION AND DELIVERY

(Continued from Page 352)

great care and gentleness must be exercised so as not to damage the fetus or traumatize the mother.

6. In breech delivery, the episiotomy, in our hands, is best made under pudendal nerve block, or local, anesthesia in all cases. Following this, spontaneous or assisted delivery, also most breech extractions, can readily be performed. Additional or supplementary inhalation anesthesia is reserved for the most difficult breech extractions, and most forceps deliveries of the aftercoming head can readily be performed under pudendal nerve block anesthesia.

7. The use of x-ray pelvimetry, plus a relatively accurate assessment of fetal size, permits a more ready determination of anticipated fetopelvic disproportion, and thus the decision as to the necessity of section is more validly reached.

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Michigan State Medical Society

Annual Session of the Council

January 24-25, 1957

HIGHLIGHTS

- The Auditors' Report for the year 1956 and the budgets for 1957 were approved (see page 375).
- Annual Reports of the Secretary, Treasurer, Editor and Rheumatic Fever Coordinator were presented and approved. Reports of the three Standing Committees of The Council (County Societies, Finance, Publication) meetings of January 23, 1957, were accepted.
- Secretary L. Fernald Foster, M.D., Bay City; Treasurer William A. Hyland, M.D., Grand Rapids; Editor Wilfrid Haughey, M.D., Battle Creek, were re-elected for 1957.
- Progress report on Michigan Medical Service was presented by L. Fernald Foster, M.D., President, and Jay C. Ketchum, Executive Vice President of Blue Shield; progress report on Michigan Hospital Service was given by Wm. S. McNary, Executive Vice President of Michigan Blue Cross.
- Annual reports of individual Councilors on the condition of the profession in their Districts were presented.
- Monthly reports of Council Chairman D. Bruce Wiley, M.D., Utica; President Arch Walls, M.D., Detroit; President-Elect G. W. Slagle, M.D., Battle Creek; Secretary L. Fernald Foster, M.D., Bay City; and Speaker K. H. Johnson, M.D., Lansing, were presented and accepted.
- Michigan Health Commissioner A. E. Heustis, M.D., Lansing, informed The Council on current problems in preventive medicine. The Council approved five items in the Michigan Health Department's budgetary recommendations to the 1957 Legislature including appropriation for polio vaccine; tuberculosis post-sanatorium care; follow-up for prevention of relapse of mental illness; appropriation for inspection of nursing homes; and migrant workers' health program. The Council specifically disapproved two other items: re establishment of consultant team in long-term illness; and home-care nursing programs. The Council took no action on the proposal re air-pollution control.
- Committee on Site for New MSMS Headquarters Building reported on various opportunities available in Lansing and environs, and was instructed to continue its studies.
- Home Town Medical Care Program.—Jay C. Ketchum, representing Michigan Medical Service which has served as intermediary for this program in Michigan over the last ten years, reported on a crisis resulting from recent VA regulation that practically cuts Blue Shield services to merely issuing payment checks. A committee of three (William Bromme, M.D., Detroit, Chairman; W. S. Jones, M.D., Menominee, and G. W. Slagle, M.D., Battle Creek) was appointed to study this matter, to attend an AMA-sponsored meeting in Chicago on the subject, and report to the MSMS Executive Committee of The Council on March 12.
- Beaumont Memorial.—Recent contributions to the Beaumont Memorial from members of the Michigan State Medical Society total \$7,652.50. A vote of thanks to these generous donors was placed on the minutes of The Council.

- Dr. Harlan H. Hatcher, President of the University of Michigan, acknowledged receipt of MSMS letter containing the resolution recommending the establishment of a department of general practice in medical schools, it was reported.
- Final plans for organization of the Mid-Summer Session of The Council were presented and approved. To expedite the increased load of work, the session is being moved up twenty-four hours, resulting in a three-day instead of a two-day meeting, as in the past.
- Employment of a Scientific Director for the Michigan State Medical Society, as recommended in the Secretary's Annual Report, was approved.
- The President appointed the Tuberculosis Control Committee (an MSMS standing committee) as the committee to study excess tuberculosis beds in sanatoriums, in accordance with the 1956 MSMS House of Delegates resolution.
- C. E. Umphrey, M.D., Detroit, Past President of MSMS, was chosen as Chairman for Michigan of the American Medical Education Foundation, on appointment of President Walls.
- Michigan Crippled Children Commission Director Carleton Dean, M.D., Lansing, outlined mutual problems to The Councilors for their information and advice.
- Committee reports were presented by: (1) Iodized Salt Committee, meeting of December 14; (2) Arbitration Committee, December 28 and January 11; (3) Preventive Medicine, January 10; (4) Legislative Committee, January 10; (5) Tuberculosis Control Committee, January 11; (6) Medical Advisory Committee to State Department of Social Welfare, December 12 and January 20; (7) Joint Committee to Meet with Michigan Society of Neurology and Psychiatry and Michigan Psychological Association, January 2; (8) Committee on Michigan Medical Service, January 23; (9) Comprehensive Prepaid Medical Care Plans, January 11; (10) Medical Advisory Committee to Michigan Hospital Service, January 16; (11) Permanent Conference Committee, January 16; (12) Post-graduate Medical Education Committee, January 17.
- Immunization Procedures.—The Council reaffirmed its policy of furthering—through adequate publicity to the public—the value of polio immunization and all other immunization procedures through proper media.
- Report of S. E. Gould, M.D., of Eloise, re Code of Procedure and Ethics Relating to Autopsies, was presented and approved with thanks.
- Community Health Association.—Creation of this proposed “association” under sponsorship of the UAW-CIO, was thoroughly discussed. The MSMS Committee on Michigan Medical Service was authorized to develop whatever program it recommends and to communicate with the Speaker of the House of Delegates to call a special session of the House, when ready.
- Program for the MSMS County Secretaries-Public Relations Seminar of January 25-26-27, in Detroit, was presented and approved.
- The Council congratulated the Michigan Cancer Coordinating Committee on its new brochure “Strength Through Unity Against Cancer,” for lay distribution.
- The Home-Visit Program of the Pediatrics Department, University of Michigan, was approved—subject to approval by the county medical societies in the areas where this program is to be used.
- Public Relations Counsel's monthly report included factual data on legislation; polio immunization publicity campaign; health exhibits at state and county fairs; *Parade* article by President Walls; and January 17 meeting with practicing pharmacists and representatives of Michigan Board of Pharmacy on a legal matter.

SECRETARY'S ANNUAL REPORT—1956

TO: The Council of the Michigan State Medical Society:

I herewith submit the annual report of the Secretary for the year 1956.

MEMBERSHIP

The Michigan State Medical Society membership for 1956 showed a total of 6,360 members, including 58 retired, 264 Life and Emeritus, 454 Associate-Military and 6 Honorary members. The total paid membership was 5,687 with net dues of \$300,745.25. The 1956 membership was once again at the highest peak in the history of the Society. The number of members with unpaid dues for 1956 was 108.*

DEATHS DURING 1956

I must regretfully report a total of one hundred ten deaths among members during the past year.

Alpena County—P. W. Butterfield, Alpena, Michigan.

Bay County—Edward S. Huckins, M.D., Bay City; F. Pitkin Husted, M.D., Bay City; Robert S. Taylor, M.D., Bay City; Edward C. Warren, M.D., Vanderbilt.

Berrien County—Wm. L. Helkie, M.D., Three Oaks; Charles E. Tompkins, M.D., Benton Harbor.

Chippewa County—Donald A. Cowan, M.D., Sault Ste. Marie; Dwight F. Scott, M.D., Sault Ste. Marie.

Delta County—John J. Walch, M.D., Escanaba.

Genesee County—John C. Benson, Sr., M.D., Flint; John H. Charters, M.D., Fenton; Raymond S. Halligan, M.D., Flint; Arthur J. Hamilton, M.D., Flint; Kenneth B. Moore, M.D., Flint; Wells C. Reid, M.D., Goodrich; Arthur J. Reynolds, M.D., Flint; David L. Treat, M.D., Flint.

Grand Traverse County—Charles Scott Miller, M.D., Traverse City; R. Philip Sheets, M.D., Traverse City; Lewis R. Way, M.D., Traverse City.

Houghton County—W. T. S. Gregg, M.D., Eagle Harbor.

Huron County—Duncan J. Monroe, M.D., Elkton.

Ingham County—Earl H. Foust, M.D., Lansing; LeRoy A. Potter (Honorary) Lansing; Harold W. Wiley, M.D., Lansing.

Jackson County—Thomas E. Hackett, M.D., Jackson; Lester J. Harris, M.D., Jackson.

Kalamazoo County—Howard C. Jackson, M.D., Kalamazoo.

Kent County—Jacob D. Brook, M.D., Grandville; Louis H. Chamberlain, M.D., Grand Rapids; Thies DeYoung, M.D., Sparta; James Henry, M.D., Grand Rapids; Clarice L. McDougall, M.D., Grand Rapids; Joseph L. McKenna, M.D., Grand Rapids; Albert Noordewier, M.D., Grand Rapids; Torrance Reed, M.D., Grand Rapids; Edwin M. Smith, M.D., Grand Rapids.

Lapeer County—Henry G. Merz, M.D., Lapeer.

Lenawee County—Ara B. Hewes, M.D., Adrian.

Macomb County—B. Morgan Parker, M.D., Utica.

Marquette-Alger County—Frank O. Paull, M.D., Marquette.

Menominee County—Allen R. Peterson, M.D., Daggott.

Midland County—Joseph H. Sherck, M.D., Midland.

Monroe County—Wm. J. Gelhaus, M.D., Monroe.

Muskegon County—Charles J. Bloom, M.D., Muskegon; John L. Loomis, M.D., Vista, California; Walter C. Swartout, M.D., Muskegon; Charles A. Teifer, M.D., Muskegon.

Oakland County—Robert H. Baker, M.D., Pontiac; Robert B. Hasner, M.D., Royal Oak; H. A. Sibley, M.D., Pontiac; Milton J. Uloth, M.D., Ortonville; Harold L. Van Haltern, M.D., Pontiac.

Oceana County—Arthur R. Hayton, M.D., Shelby.

Ottawa County—Abraham Leenhouts, M.D., Holland.

Saginaw County—Fred J. Hohn, M.D., Saginaw.

St. Clair County—Robert J. Biggar, M.D., Persian Gulf; Edmond W. Fitzgerald, M.D., Port Huron.

St. Joseph County—Frank J. Tesar, M.D., Centerville.

Shiawassee County—Scott B. Hambly, M.D., Morrice; Julius S. Janci, M.D., Owosso.

Tuscola County—Gottlieb H. Kaven, M.D., Unionville.

Van Buren County—John R. Giffen, M.D., Bangor.

Washtenaw County—William M. Brace, M.D., Ann Arbor; George F. Muehlig, M.D., Ann Arbor.

Wayne County—Frederick B. Ashten, M.D., Detroit; Samuel Balofsky, M.D., Detroit; Robert Beattie, M.D., Detroit; Clark D. Brooks, M.D., Detroit; Cornelius Carey, M.D., Detroit; Claire H. Carpenter, M.D., Detroit; William Edward Chase, M.D., Detroit; Lewis E. Daniels, M.D., Detroit; William A. Defnet, M.D., Detroit; Louis L. Denison, M.D., Detroit; Karl Dubpernell, M.D., Detroit; Osborn H. B. Ensing, M.D., Detroit; William A. Evans, Jr., M.D., Detroit; Sylvester Ford, M.D., Detroit; Daniel P. Foster, M.D., Detroit; Leonard Fox, M.D., Wyandotte; George E. Frothingham, M.D., Detroit; Robert W. Gillman, M.D., Detroit; John E. Gleason, M.D., Detroit; William Hamilton, M.D., Detroit; Joseph O. Hayes, M.D., Detroit; John E. Hopkins, M.D., Detroit; Thomas F. Horrigan, M.D., Harper Woods; Louis O. Horvath, M.D., Detroit; Ralph G. Hubbard, M.D., Detroit; Ernest H. Jensen, M.D., Eloise; Ned Block Kalder, M.D., Detroit; L. W. Lang, M.D., Detroit; Arthur W. McGarvah, M.D., Detroit; John B. Morin, M.D., Detroit; Joseph A. Nowicki, M.D., Detroit; James A. Owen, M.D., Detroit; John P. Parsons, M.D., Grosse Pointe Park; George W. Renton, M.D., Detroit; John F. Rieg, M.D., Detroit; Stanley B. Robertson, M.D., Detroit; Frederic L. Robinson, M.D., East Dearborn; John C. Russell, M.D., Detroit; Foster D. Scruton, M.D., Detroit; Emil R. Simon, M.D., Detroit; Clarence E. Simpson, M.D., Detroit; William S. Sims, M.D., Detroit; Karl L. Swift, M.D., Detroit; Harry E. Vergosen, M.D., Detroit.

1956 ANNUAL SESSION

Once again records of attendance were broken and the 1956 Annual Session chalked up a total registration of 4,290. The figure includes Doctors of Medicine 2,454; Guests 649; Exhibitors 554; Woman's Auxiliary members 232 and Medical Assistants Society members 401. The General Assembly type of program with discussion conference was continued as in previous years and the 102 technical exhibits received the usual generous attention of the registrants.

ORGANIZATIONAL ACTIVITIES

MICHIGAN CLINICAL INSTITUTE

The Tenth Michigan Clinical Institute was held in Detroit, March 7-8-9, 1956. Total registration was 2,475 and the Operating Room Nurses Conference was held in conjunction with this year's M.C.I. as well as a special conference for Residents, Interns and Senior Medical Students. Nine members of the Michigan State Medical Society who were Presidents of national medical organizations received special awards at a luncheon held in their honor.

ANNUAL SECRETARIES-PUBLIC RELATIONS

CONFERENCE

In 1956 the three-day County Secretaries-Public Relations Seminar was inaugurated and was held January 27-28-29. The program was so successful that the participants voted overwhelmingly to continue the three-day format next year.

*The detailed Membership Record by counties will be published in the April number.

SECRETARY'S LETTERS

As part of the Society's general educational and informational program for individual members and for component County Societies there were issued during the year 1956 eight Secretary's Letters (three to all members and five to County Secretaries and keymen). These informational bulletins were in addition to the monthly issues of *THE JOURNAL* with its scientific articles and informative news items. In addition, eight Legislative Bulletins were issued to keymen during the 1956 Legislative Session to keep the membership informed of activities in the State Legislature pertaining to the practice of medicine.

COMMITTEES

Time and space do not permit the listing in detail of the many activities of all the committees contributing to the many splendid programs of the State Society. The accomplishments of the committees of the Society were achieved at the expense of many hours of personal sacrifice on the part of the personnel of the various committees. During 1956, eighty-one meetings were held by the forty-eight committees of the Michigan State Medical Society. Practically every meeting was attended by your Executive Director or Secretary. A total of 527 members of your State Medical Society gave freely of their time to attend these meetings and assist in the operational activities of the State Society. Too much commendation cannot be accorded the committee members who contributed their time and effort to develop and execute constructive programs—both scientific and economic—for the public welfare and to maintain the position of leadership enjoyed by the Michigan State Medical Society in the field of progressive medical planning.

FINANCES

An audit of the books of the Society was completed by Knostman & Smith as of December 24, 1956. This has been submitted to the Finance Committee for study and is available to any member of the Society for perusal at the Executive office, 606 Townsend St., Lansing, Michigan. A brief summary of the audit produces the following information:

Assets:

Cash	\$ 29,813.31
Accounts Receivable	23,977.95
Investments	229,795.25
Property & Equipment	53,279.20
Other Assets	231.66

Total Assets\$337,097.37

Liabilities:

Accounts Payable	\$ 16,292.44
Deferred Income	15,810.00

Total Liabilities\$ 32,102.44

*Society Equities**Reserved for Special Purposes*

Public Education Reserve	\$ 57,245.00
Public Education Program	73,891.87
Public Service Account	3,675.16
Professional Relations Account	4,897.50
Rheumatic Fever Control Program	7,675.56
Contingent Fund	53,614.34
Building Maintenance	14,124.94
General Society Equity	89,870.56

Total Liabilities & Equities.....\$337,097.37

It is noted from the Income and Expense summary of the period December 24, 1955, to December 24, 1956, that the total income for the period was \$440,607.90 less expenses of \$400,547.59 producing a net gain for the year of \$40,060.31 with a balance on hand December 24, 1956, of \$304,994.93.

THE JOURNAL

The following financial information relative to *THE JOURNAL* is found in the annual audit report of Knostman & Smith.

Income was \$94,400.27 which is \$10,500.27 over the tentative budget for 1956. Expenses were \$93,303.57 which was \$9,403.57 over the 1956 estimated budget. However, this figure indicates a net gain for the year 1956 of \$1,096.70.

Included in the total income of \$94,400.27 was only \$8,173.49 received from the allocation of membership dues.

During 1956, the cover illustrations continued to be done by Mr. Dirk Gringhuis and graphically depicted various activities of the MSMS.

1956 HOUSE OF DELEGATES

The 91st Annual Session of the Michigan State Medical Society's House of Delegates was held in Detroit, September 24-25, 1956.

The House of Delegates:

1. Adopted with thanks the President's Address, the President-Elect's Address, the report of Delegates to the American Medical Association, the Annual Report of the President of Woman's Auxiliary to Michigan State Medical Society, and the Annual Report of the President of Michigan State Medical Assistants Society.

2. The Annual Reports of The Council (including the Annual Reports of Committees of The Council) were adopted as amended.

3. Adopted Annual Reports of all Standing Committees and of all Special Committees of the Society; also the report of the House of Delegates' Committee to Study MSMS Financial Structure.

4. Elected Ralph G. Cook, M.D., Kalamazoo, and J. H. Sherk, M.D., Midland (posthumously), as Michigan's Foremost Family Physicians for 1956.

5. Took action on proposed amendments to Constitution and By-Laws, as follows: (a) By-Laws, Chapter 8, Section 10-g—procedure in case of vacancy on Council—approved as amended; (b) By-Laws, Chapter 2, Section 2—re membership in county of practice—disapproved; (c) Constitution, Article X, Sections 1-2-3—to make Vice Speaker a voting member of The Council and of its Executive Committee—to 1957 House of Delegates; (d) By-Laws, Chapter 8, Section 10-j (13)—changing name of a House of Delegates Reference Committee (National Defense and Disaster Planning)—approved.

6. *Adopted resolutions concerning:* (a) Deferring Action re Discipline of Members; (b) Continuation of Councilor Conferences; (c) Establishment of Departments of General Practice in Medical Schools; (d) Committee to Study Use of Word "Clinic"; (e) Equal Health Opportunities for All; (f) Permanent Advisory Committee on Fees (as amended); (g) Practice of Psychiatry is Practice of Medicine; (h) Honorary Membership to J. Joseph Herbert and Dean Gordon H. Scott; (i) Expansion of Medical School Facilities at Wayne State University; (j) Regulation of Ambulance Operation approved and referred to Committee on Traffic Safety; (k) Adequate Funds to carry out Civil Defense (as amended); (l) Medical Classes at Medical Schools to send Representatives to House of Delegates Sessions (as amended); (m) MSMS representatives on Committee Drafting Uniform Autopsy Code (as amended); (n) Esteem of House of Delegates for J. Joseph Herbert; (o) Appreciation of Henry A. Luce, M.D.; (p) New MSMS Headquarters; (q) Appreciation to H. V. Higley, Veterans Administration Administrator; (r) Committee to Study excess beds in Tuberculosis Sanatoriums.

7. *Adopted substitute resolutions concerning:* (a) Michigan Medical Service Annual Report to MSMS House of Delegates; (b) Comprehensive Prepaid Medi-

ANNUAL SESSION OF THE COUNCIL

cal Care Insurance Plans and Blue Shield Plans for Diagnostic Out-Patient Services; (c) (Urging Total Participation of M.D.'s in Michigan Medical Service (two resolutions); (d) Plan for Expediting Work of House of Delegates.

8. *Tabled Motion* re Information from AMA Delegates.

9. *Deferred Resolutions re:* (a) Postgraduate Education of Other Healing Arts; (b) MSMS Attitude re Other Healing Arts; (c) Approval of Mediation-Ethics-Grievance Committee's Recommendations.

10. *Disapproved Resolutions concerning:* (a) Council Minutes to all MSMS Delegates; (b) Annual Registration of M.D.'s (c) Submission of House of Delegates Resolutions in Advance; (d) Report Within Seven Days of House of Delegates Proceedings; (e) State and County Prerogatives in Discipline of Members; (f) MSMS Approval of County Society Constitution and By-Laws Revisions.

11. *Elected to Special Memberships:*

(a) Thirty-one members to Life Membership: (Berrien County) Clarence Gillette, M.D.; (Genesee County) Henry Cook, M.D.; (Ionia County) J. W. C. Fleming, M.D.; (Kalamazoo County) U. Sherman Gregg, M.D.; (Marquette County) Celestin LeGolván, M.D., and George M. Waldie, M.D.; (Muskegon County) Harry L. Clark, M.D., Marie Keilin, M.D., and Eugene S. Thornton, M.D.; (Oakland County) George L. Hagman, M.D., and John K. Ormond, M.D.; (Wayne County) Stilson R. Ashe, M.D., William N. Braley, M.D., Fritz W. Bramigk, M.D., Bruno B. Brunke, M.D., Peter H. Darpin, M.D., Henri L. Gratton, M.D., Sarkis K. Keshishian, M.D., John C. Koch, M.D., Alfred D. LaFerte, M.D., Wm. W. MacGregor, M.D., Emil V. Mayer, M.D., Wm. R. McClure, M.D., Cary P. McCord, M.D., Wm. E. Miller, M.D., Grover C. Penberthy, M.D., Lyman J. Pinney, M.D., Ralph W. Ridge, M.D., Paul C. Rhode, M.D., Jacob M. Sutherland, M.D., and Elmer L. Whitney, M.D.

(b) Nine members to Retired Membership: (Calhoun) A. D. Sharp, M.D.; (Saginaw County) Lloyd A. Campbell, M.D.; (Wayne County) Ladislaus Bogusz, M.D.; Clyde H. Chase, M.D., James C. Danforth, Sr., M.D.; Frank MacKenzie, M.D., William D. Ryan, M.D., Clarence E. Weaver, M.D., and Wirt A. Dawson, M.D.

(c) Fifty-nine M.D.'s to Associate Membership: (Marquette-Alger County) Sara Schweinsberg, M.D.; (Muskegon County) Mary Ellen Hennessey, M.D.; (Washtenaw County) Malcolm A. Bagshaw, M.D., Joseph B. Boulos, M.D., Gerald L. Brody, M.D., Joseph H. Chandler, M.D., Norman E. Clarke, Jr., M.D., Mark A. Everett, M.D., Norman A. Fox, Jr., M.D., Robert L. Gillett, M.D., Glen G. Golloway, M.D., Jack E. Goodwin, M.D., John T. Hayes, M.D., Erwin P. Hoffman, M.D., Clifford L. House, M.D., Edwin M. Hubbard, M.D., A. Hartwell Jewell, Jr., M.D., J. A. Arthur Lavigne, M.D., George E. Lewis, Jr., M.D., John D. Lynch, M.D., James W. Mackenzie, M.D., Henry E. Malcolm, M.D., Rolf F. Miller, M.D., Robert F. Muller, M.D., Paul Natvig, M.D., Rudolf E. Nobel, M.D., Leon D. Ostrander, Jr., M.D., Warren H. Pearse, M.D., Christosomo C. Santos, M.D., Harry J. Schmidt, M.D., Russell Scott, Jr., M.D., Irving Shapiro, M.D., Edwin M. Smith, M.D., Philip R. Steinmetz, M.D., John P. Stewart, M.D., George R. Thompson, M.D., Frederik S. Van Reesema, M.D., Peter D. Vreede, M.D., Donald J. Holmes, M.D., Prasana K. Pati, M.D., John B. Tisserand, M.D., William S. Wilson, M.D., and James A. Wood, M.D.; (Wayne County) Oscar L. Barland, M.D., Robert Borchak, M.D., Richard A. Bruhl, M.D., John P. Connolly, M.D., Douglas R. Coyne, M.D., Leonard Fox, M.D., Maurice J. Hauser, M.D., Loyal W. Jodar, M.D., Benjamin Mihay, M.D., John H.

Schlemer, M.D., Fredrick L. Sperry, M.D., Bela J. Szappanyos, M.D., Jerome S. Weingarten, M.D., Frank A. Weiser, M.D., Joseph Weiss, M.D., and Charles R. Williams, M.D.

12. *Elected the following officers:*

- (a) A. E. Schiller, M.D., Detroit, as Councilor of the 1st District (1961).
- (b) H. J. Meier, M.D., Coldwater, as Councilor of the 3rd District (1961).
- (c) Ralph W. Shook, M.D., Kalamazoo, as Councilor of the 4th District (1961).
- (d) C. Allen Payne, M.D., Grand Rapids, as Councilor of the 5th District (1961).
- (e) H. H. Hiscock, M.D., Flint, as Councilor of the 6th District (1961).
- (f) W. D. Barrett, M.D., Detroit (1958); W. H. Huron, M.D., Iron Mountain (1958); and R. L. Novy, M.D., Detroit (1958), as Delegates to the American Medical Association.
- (g) Wm. Bromme, M.D., Detroit (1958); J. R. Rodger, M.D., Bellaire (1958); and G. W. Slagle, M.D., Battle Creek (1958), as Alternate Delegates to the American Medical Association.
- (h) G. W. Slagle, M.D., Battle Creek, as President-Elect.
- (i) K. H. Johnson, M.D., Lansing, as Speaker, House of Delegates.
- (j) J. J. Lightbody, M.D., Detroit, as Vice Speaker, House of Delegates.

OTHER ORGANIZATIONAL ACTIVITIES

1. The Residents-Internes-Senior Medical Students Conference was held in Detroit, March 7, 1956. The MSMS again financially sponsored sending Delegates from Michigan's two Medical Schools to the Student AMA Convention in Chicago May 1956.

2. Semi-annual meetings of the seven MSMS delegates to the AMA and the alternate delegates were held as usual.

3. Modern membership recording was instituted during the year to facilitate the MSMS records and billing. This was done by utilizing IBM equipment. The results of this have already justified the judgment of The Council in installing this method. For instance, in January 1956, a total of 231 members paid dues, totaling \$12,690.00; to January 21, 1957, a total of 1,737 paid dues, totaling \$98,185.00.

4. Councilor District meetings were held throughout the state as an innovation in better informing the members of the MSMS House of Delegates in matters to be considered at the annual meeting in September.

MICHIGAN MEDICAL SERVICE

This organization continues to be a major activity of the MSMS. During the year several additional MSMS members were added to the Board of Directors. Of the officer personnel your secretary became President, MSMS President Arch Walls was chosen Vice-President, Editor Wilfrid Haughey became Chairman of the Board and Councilor Harris succeeded the late Robert H. Baker, M.D., as secretary.

Appreciation of the need for changes in the MMS contracts and benefits is evidenced by the fact that three committees of Doctors of Medicine, one from the House of Delegates, one from the MSMS and one from MMS are now studying changes to meet the various demands, better service to the public and services consistent with constant economic changes. These studies will be made with the greatest possible realism and with constant attention to actuarial soundness.

Women's Auxiliary.—The Auxiliary continued its many projects and had a very successful and active year.

Medical Assistants Society.—This group continued its activities and expanded its organization in The Upper

Peninsula. Michigan Delegates and members of the Advisory Committee played an important part in the development of a National Organization at a meeting held in Milwaukee.

Contacts with Governmental and Voluntary agencies have been maintained effectively during the year.

BEAUMONT MEMORIAL RESTORATION

The Beaumont Committee, under the chairmanship of Otto O. Beck, M.D., has actively pursued its activities. A drive for additional funds to liquidate the \$9,000.00 deficit was successful in raising over \$7,600.00.

PUBLIC RELATIONS

Serious attempts to influence public opinion against voluntary health insurance were made during the past twelve months. This naturally affected doctors of medicine both directly and indirectly.

Certainly, this is no news to you and perhaps does not belong in the Secretary's report on MSMS public relations activities. But I think it will serve as a contrasting background for the following outline of positive public relations endeavor.

It would seem that the medical profession could now say that it is "Winning Friends for Medicine." And the MSMS PR guidebook is still the "bible" for county medical societies in developing their increasingly efficient public relations programs.

Sparking this job of carrying the PR message were MSMS officers and Councilors as well as G. Allen Payne, M.D., Immediate Past Chairman of the PR Committee, PR Counsel H. W. Brennehan and the public relations field secretaries. Special recognition should go to William S. Jones, M.D., for his contribution to good relations by attending a meeting of nearly every component county society. As you realize, this entailed literally thousands of miles of travel and innumerable days away from his busy practice.

In September, following Doctor Payne's election as Councilor, R. Wallace Teed, M.D., was appointed Chairman of the MSMS PR Committee, succeeding Doctor Payne.

Press relations, despite the attack previously mentioned, improved a good deal in 1956, due principally to the forthrightness which MSMS exhibited in its contact with writers and editors.

Figures or statistics on the amount of newspaper coverage devoted to medicine and M.D.'s are sometimes meaningless unless they can be related in more understandable terms. For example, the most recent press release prepared by our staff was reprinted in 101 Michigan newspapers. The item was the MSMS immunization campaign, "Operation Armor." Similar coverage was accorded releases on other MSMS programs and activities, such as Traffic Safety, Annual Session, Awards, and so on.

Television programming supplied by MSMS during 1956 amounted to just under forty-five hours on both Detroit and outstate stations. Total running time of motion pictures furnished by MSMS to civic groups, TV stations amounted to over 150 hours. Radio received special attention in 1956 and in addition to the 448 hours of radio programming supplied by MSMS, special news releases and tape recordings were sent periodically to all Michigan stations. The final bright spot in the communications picture is the outstanding coverage accorded our 1956 Annual Session by *all* media.

A new project and service is currently under development in our Public Relations Office. This is the PR Library, being set up by a qualified librarian so that the information it contains can be put to maximum use by MSMS members and other interested groups. Ours is the first state medical society to organize a library that is specifically adapted to existing and future medi-

cal PR needs. The secretary who will serve as part-time librarian, will be responsible for filling loan requests for reference material in scientific and socioeconomic areas as well as for motion pictures, radio tapes, scripts and other material too numerous to mention.

Hardly a year goes by that Michigan's PR effort is not cited for excellence. The year 1956 was no exception for our state-wide campaign during Medical Education Week received national attention and our program outline and scrapbook was reproduced for distribution to PR departments of the nation's eighty-one medical schools.

I should like, at this point, to forego the detailing of our comprehensive PR program, other than to mention the broader spheres of activity. These include: pamphlet production and distribution, exhibits, general society liaison and committee service, attendance at state and national meetings by Society Officers and PR staff, annual awards, legislative activity, motion picture production.

The past PR effort is important only in relation to the future and, gentlemen, our future for 1957 is already overcast with storm clouds. The forecast is not all gloom and doom, but a storm is most certainly coming and our ability to weather it will depend in large measure on the success of our individual and collective relations with the public. We believe that 1957 will be a year of decision for the voluntary health insurance plans and thus, inescapably, it will be a year of decision for the medical profession. We shall need every ounce of good will that we can garner. We shall need public understanding. We shall need press understanding and support. We shall need to make progress in becoming the recognized *leaders* in the field of health care and perhaps this could best be done by willingly accepting the challenges of tomorrow that are already apparent.

These things must be done this year, soon, now—before it is too late—or we shall fail.

LEGISLATION

The 1956 sessions of the Michigan Legislature and the national Congress have been duly recorded in the mid-summer report of The Council. No elaboration is needed here. However, since both of these legislative bodies are now preparing to embark on a new year's deliberation, this is a propitious time to look ahead to the tasks confronting Michigan Doctors of Medicine in the legislative and political fields.

The Legislative Committee of MSMS, in meeting January 10, apprised us that we may expect the introduction of approximately eighty legislative proposals in Lansing affecting the field of health; many will be revivals of proposals previously defeated in the House and Senate, while some will be the products of the changing times, such as those in the realms of atomic energy, automation and specialization. More concise information will be forthcoming from the MSMS executive office as the legislation appears in fact.

Noteworthy, though, is the progress being made by a liaison committee between the MSMS and the Michigan Osteopathic Association toward better agreement between the two professional groups, in contrast to past legislative differences.

There is one fact that becomes more evident each year. The impact of legislative activity and political action upon the medical profession is powerful, and vice versa. At no time in history has it been more patent that the individual M.D. has a stake, a place and a responsibility in the political sphere. The doctor is a man of his community, and the obligations of his oath to provide the best health care to his patient go beyond his office door into the legislative halls in Lansing and Washington. This is the age of socio-

ANNUAL SESSION OF THE COUNCIL

economic change in the practice of medicine as well as scientific progress in the art of healing.

THE EXECUTIVE OFFICE AND PERSONNEL

Various improvements have been made in the Executive Offices. Increased parking facilities have been provided. A library has been established in the basement to house various reference records, recordings, legal opinions and publications.

During 1956, the MSMS suffered a loss in the death of its Legal Counsel, J. Joseph Herbert. This position was filled by securing the services of Mr. Lester Dodd of Detroit. Mr. Dodd is a past president of the Michigan State Bar.

During the year, Assistant Public Relations Counsel, DeWitt Brewer, resigned and was replaced by Warren Tryloff, Field Secretary in the Detroit office. He, in turn, was replaced by Jack Pardee as Field Secretary for the Detroit area. Several additions and replacements were made in the stenographic pool, and Miss Vada Studt was transferred from the pool to the third floor where she becomes an Assistant Secretary in the Public Relations Department and assumes the new duties of Librarian.

The stenographic pool is still operating shorthanded and there is an urgent increasing need for an assistant bookkeeper to relieve Mr. Roney of some of his activities which now include all the bookkeeping, membership records and JOURNAL advertising activities.

During the year, a committee was appointed to take a "Big Look" at the general organizational set-up and physical plant of the Society. This committee has already recommended some changes in titles of our MSMS office personnel.

Elsewhere on the agenda of this meeting, pursuant to your instructions, your Secretary is making suggestions regarding changes in the MSMS job classification and salary schedule.

The need for increasing office personnel is indicated in the ever-increasing office detail as illustrated in the following figures:

In 1956, the Addressograph ran.....	386,000 pieces
In 1956, the Meter Machine ran.....	215,022 pieces
Total	601,022 pieces
Averages	7,700 pieces a week
	1,540 pieces a day

THE COUNCIL

Two new Councilors were elected by the 1956 House of Delegates.

C. Allen Payne, M.D., Grand Rapids, succeeded J. D. Miller, M.D., in the 5th District.

Harold J. Meier, M.D., Coldwater, succeeded George W. Slagle, M.D., in the 3rd District.

HIGHLIGHTS IN PROGRESS DURING 1956

1. New Councilor Conferences were held in every District between July 23 and September 23 to outline socio-economic progress to MSMS Delegates, Alternate Delegates and County Society Officers.

2. "Medicare" was inaugurated during the past year (U. S. Public Law 539) to provide medical and surgical care for servicemen's dependents. The contract for Michigan was negotiated October 24, in Washington, D. C. Michigan Medical Service was appointed agent of MSMS in this new program.

3. The Governor's Public Health Study Commission was supplied with a statement outlining the position of the Michigan State Medical Society on various public health measures. The outline was presented by MSMS President Arch Walls, M.D.

4. The Governor's Study Commission on Prepaid Hospital Care Plans requested MSMS to name a consultant to work with the Commission in undertaking this study. Secretary Foster was appointed. (The study was

held in abeyance pending selection of a director and obtaining of adequate funds.)

5. A Liaison Committee with the Michigan State Board of Registration in Medicine was appointed. The Council, and subsequently the House of Delegates, adopted resolutions recommending that the Legislature make the office of Executive Secretary of the State Board a full-time position, with adequate remuneration.

6. Adoption of National Board Examinations in Michigan was discussed at a joint meeting with representatives of the two medical schools in this State and the State Board of Registration.

7. The Veterans Administration "home-town medical care program" was continued in Michigan, after MSMS protest against its discontinuance scheduled for July 1, 1957. This insures a continuation of *good medical care* to the veteran, rendered in *his home community*.

8. The Council, and subsequently the House of Delegates, adopted resolutions urging increase in the teaching personnel of Wayne State University College of Medicine, to permit addition of fifty more first-year students annually. Necessary funds to cover this needed increase have been requested of the 1957 Legislature by WSU.

9. Establishment of full-time chairs of preventive medicine and public health at each of the two medical schools in Michigan was endorsed by MSMS—provided such chairs are filled by Doctors of Medicine.

10. The MSMS Medical Advisory Committee to Michigan Hospital Service was reactivated in August at the specific invitation of MMS President John W. Paynter.

11. Michigan Week was endorsed and all MSMS members were urged to actively cooperate in reminding patients that Michigan is a good state to live in. MSMS Executive Director Wm. J. Burns was a member of the Board of Michigan Week.

12. President Arch Walls, M.D., was authorized to appoint an MSMS Committee to meet with officers of the UAW-CIO to discuss medical matters. Committee was appointed and several meetings have been held.

13. The Council and the House of Delegates authorized the selection of a new site and the erection of a new MSMS headquarters building, to adequately house the growing facilities of the Society. Several meetings of the planning committee have been held.

14. The generosity of the membership is best indicated by recent contributions to the Beaumont Memorial Restoration: in less than two months, up to January 23, a total of \$7,652.50 was received against the \$9,000 indebtedness.

15. Two important committees were appointed during the past year, one to study care of the mentally disturbed in order to obviate long-time hospitalization; the other a Committee on Healing Arts Study.

16. A Gold Medal Award for scientific achievement in this state was created by MSMS during the past year.

17. To service physicians covered by the Medical health and accident insurance program, Richard M. McDermott was appointed as full-time Michigan representative by the Provident Life and Accident Insurance Company.

18. IBM Equipment was installed by MSMS in 1956 to expedite the handling of MSMS records, beginning January 1, 1957 and to aid the busy doctor with this annual bit of detail.

19. "So You've Been Elected," an organizational handbook for county society officers was developed by MSMS and distributed at the County Secretaries-Public Relations Seminary of January 29, 1956.

The County Secretaries one-day Conference was broadened into a three-day Seminar in 1956, with further up-to-date information to county society officers on socio-economic problems.

20. "Progress"—Because Doctors Work Together" was another informative brochure printed by MSMS during the past year which outlined MSMS services, scientific work, socio-economic activities and its growing scope of interest in the Michigan scene.

RECOMMENDATIONS

After a careful consideration of the continued successful operation of the MSMS and its many projects, I respectfully submit the following recommendations:

1. That MSMS inaugurate necessary surveys on strictly economic and sociologic phases of medical practice, to ascertain where the medical profession is and where it is going in the next ten years in incomes and economic status. According to the Medical Economic survey, Michigan physicians enjoy the greatest incomes (both for general practitioners and for specialist) among all the states in the Union. MSMS should continue to insure such a happy condition for its members. However, very few M.D.'s get much information on economic matters—other than those who attend the Annual County Secretaries Seminar. Hence the above recommendation.

2. That studies be inaugurated concerning the relationships and responsibilities between county medical societies and hospitals in the separate communities.

This would show the position of greater and greater importance to the medical practitioner now assumed by the hospital staff—to the detriment of the county medical society. It will also indicate the proper spheres of influence which rightfully belongs to the M.D. in hospital administration.

3. That a medical coordinator be employed for all scientific activities of the MSMS, both in Postgraduate and Preventive medicine fields.

This man would be a successor to Dr. DeVel, with his duties enlarged. One advantage of this action would be that MSMS might receive more grants from fund raising organizations—such as it now receives for the rheumatic fever activity from the Michigan Heart Association.

4. That the audit date of MSMS books be changed to November 30, to achieve reports to all members of The

Council weeks in advance of the annual meeting of The Council.

5. That the MSMS employ a bookkeeper with the title of Assistant Secretary and that such an employee be assigned exclusively to Mr. Roney's department—dealing with bookkeeping, membership and Journal advertising.

6. That, subject to approval by component societies, that MSMS assume responsibility for the mailing of follow-up letters (no less than three) to those members in arrears after April 1 of each official year, in order to bring to a minimum the number of members who are subject to suspension according to MSMS By-Laws, Chapter XV, Section 2.

7. That consideration be given to the ground breaking of the new MSMS headquarters in the year 1957 so that the building may be available for use in late 1958.

Some \$150,000.00 could be available by 1958 and balance could be financed through a bank and paid off in some two to four years, depending upon the cost of the building. Meanwhile, the Executive Offices could be efficiently run in a larger and modern building and the prestige of the Society would go up with the public as well as with the medical profession.

Your Secretary is grateful for the helpful cooperation given him by this Council during the past year.

Too much commendation cannot be accorded the Executive Office staff for their untiring efforts and loyalty to the MSMS.

Your Secretary is especially appreciative of the constructive advice and services accorded him by Wm. J. Burns, Executive Director, Mr. Dodd, Legal Counsel, Hugh Breneman, Public Relations Counsel and his staff, Wilfrid Haughey, M.D., Editor, and Robert Roney, Assistant Executive Director. Our field secretaries did an unusual job in their legislative activities.

To everyone who has aided so generously and willingly in the discharge of his duties, your Secretary is most grateful.

Respectfully Submitted

L. FERNALD FOSTER, M.D.
Secretary

TREASURER'S ANNUAL REPORT—1956

(January 1 to December 24, 1956)

Mr. Chairman and members of the Council
the Michigan State Medical Society:

I herewith submit a report of the securities and cash belonging to the Michigan State Medical Society in my possession as duly elected Treasurer for the year January 1956 to January 1957.

The appended list of bonds and time certificates totaling \$92,000 face value are in lock box C131 Michigan National Bank Trust Department in Grand Rapids.

Balance on hand as of January 1, 1956.....	\$6,368.01
Interest received from bonds and certificates of deposit—January 1, 1956, to January 1, 1957.....	\$2,345.00
Balance on hand as of December 31, 1956.....	\$8,713.01

Respectfully submitted,
WILLIAM A. HYLAND, M.D.
Treasurer

MICHIGAN STATE MEDICAL SOCIETY SECURITIES

3 Michigan National Bank Savings Certificates @ \$5,000 ea.....	\$15,000
1 Michigan National Bank Savings Certificate.....	25,000
7 United States Savings Bonds, Series G @ \$5,000 ea.....	35,000
5 United States Savings Bonds, Series G @ \$1,000 ea.....	5,000
4 United States Savings Bonds, Series K @ \$1,000 ea.....	4,000
8 United States Government Notes 75-80 @ \$1,000 ea.....	8,000
Total	\$92,000

Also in Lock Box C131 are the following safe-keeping receipts covering government bonds in the name of the Society:

Michigan National Bank, Grand Rapids—Receipt #4378 dated April 27, 1956	\$25,000
(These securities are held for us in the vaults of the First National Bank of Chicago under their receipt #108665)	
Michigan National Bank, Lansing—Receipt #A718 dated January 11, 1956	45,000
Michigan National Bank, Lansing—Receipt #A726 dated February 16, 1955	10,000
Michigan National Bank, Lansing—Receipt #A864 dated March 1, 1956	25,000
Michigan National Bank, Grand Rapids—Receipt #4536 dated August 29, 1956	35,000
Total	\$140,000

TOTAL DEPOSITS MADE INTO THE TREASURER'S
COMMERCIAL ACCOUNT DURING 1956

February 1, 1956.....	\$ 375.00
March 5, 1956.....	62.50
April 30, 1956.....	297.50
May 1, 1956.....	62.50
August 14, 1956.....	375.00
September 21, 1956.....	250.00
October 26, 1956.....	110.00
November 1, 1956.....	62.50
November 16, 1956.....	437.50
November 21, 1956.....	312.50
Total	\$2,345.00

EDITOR'S ANNUAL REPORT—1956

THE JOURNAL of the MICHIGAN STATE MEDICAL SOCIETY has now completed fifty-five years of publication. You may remember it was established by Andrew P. Biddle, M.D., Secretary of the Society, to replace the annually published "Transactions." The Society had just been thoroughly reorganized into a democratic body with members, branches (County Medical Societies) and a state organization including, besides the usual officers, a Council (Board of Directors) and a legislative body (House of Delegates) on a basis of one representative for every fifty members or major fraction thereof.

The activities of the Society were being stepped up and an attempt was being made to stimulate the interest of all the doctors in the work of the Society. Previously, there had been only one meeting a year, and very little fraternizing. The Council and the newly appointed Editor established THE JOURNAL as a means of communication among all members at least once a month. The Editor published news, activities and reports, as well as scientific papers, abstracts, and reviews. Pages of THE JOURNAL were set aside and assistant editors appointed to review the latest information on such departments as medicine, surgery, et cetera. THE JOURNAL was immediately successful. The membership in the Society grew. Dr. Biddle was an educator as well as being interested in organizational medical affairs.

Down through the years our editors have carried on in somewhat the same vein. The House of Delegates is the policy-making body, The Council is charged with the financial end but interprets policy in the interim between House of Delegates meetings. The Editor is charged with the interpretation of both bodies, expressing their ideals and theory of organization; publishing for the membership the latest of scientific information, as well as reporting primarily on the economic, socio- and medico-political affairs upon which the very existence of the private practice of medicine depends.

The last fifteen years have been ones of great economic and social importance. Pressure groups, as well as government, have attempted to hamper our traditional and established liberties and privileges. Legislation has been proposed to which the profession has objected, until it became an established idea that the medical profession was opposed to everything. During these years, we have increased the size of THE JOURNAL almost 50 per cent. We have adopted a strong editorial policy of keeping our members aware of policies being offered by our detractors, and socio-economic conditions affecting our very existence.

The editorial and news features of THE JOURNAL have stressed to the readers an awareness to such problems as seemed of most interest, to the extent at times of a possible over-emphasis. The scientific section of THE JOURNAL has always presented as fine and advanced material as the best thinkers in our Society and our invited guests could give. During the year, we had 161 different names signed to our original papers. Eleven of these names appeared twice, making an average of over fourteen authors for each number.

We have prepared and published sixty editorials, forty-seven book reviews, and forty-nine memorial tributes, one to Past-President Robert Baker, and one to our Legal Counsel, J. Joseph Herbert. Nine of our members were honored for having been president of some national medical or hospital organization.

About thirteen years ago, we abandoned the stereotyped cover and began using that page of THE JOURNAL to honor some of our still living Past Presidents and Speakers of the House of Delegates. We then began casting about for specialty interesting items of value to the membership or the Society. During that thirteen years there have not been two covers of THE JOURNAL alike. Early we assigned certain specified numbers to some special interest of the profession. We published the first medical journal devoted to Atomic Medicine. We have stressed many special fields. During the year 1956, we continued to recognize distinct and compelling interests. In most instances, a proportion of the scientific papers appearing in any special number have had a bearing on the cover selected. In fact, the covers in almost every instance have been built about the subject matter.

Our January numbers for several years have been devoted in some special manner to Heart. This year it was "Rheumatic Fever—The Chain Can Be Broken." In February, we honored the University of Michigan Medical School (1850-1956) with sketches of some new buildings. March saluted Wayne State University School of Medicine with some of its most modern new buildings and its history. April, traditionally Cancer month, featured "Education-Research-Service"—"Three Swords Against Cancer." May was dedicated to the Michigan Foundation for Medical and Health Education—stressing rural M.D.'s. June, assigned to Michigan Medical Service for many years, featured the Blue Shield. July announced and published the program for the 91st Annual Session "All Roads Lead to Detroit." August—"Trauma," and as a supplement a directory of our membership, the Auxiliary, and Medical Assistants. September—Ingham County Medical Society and its 28th Annual Clinic Day. October—"Diabetes," featuring and picturing the five great leaders: Aretaeus, Langenhans, Muncowski, Kussmaul and Banting. November—"The Physician Serves His Patient—The Society Serves the Public," a public relations number with reports of the presidents or chairmen of twenty-eight committees, agencies or groups serving the public. December presented the Michigan Clinical Institute program for next March in Detroit.

We are proud of this year's Michigan State Medical Society accomplishments in every field of endeavor, and especially honored to have been active in spreading the record in a permanent form.

This year's Directory was again published in a separate section, but delayed the publication of that number of THE JOURNAL for three weeks. We are hoping that in the year of 1957, we may prepare the Directory and have it all printed except the cover, then make it part II of the number next due. July has been selected as the date of the Directory, but I trust our members will be complacent if we do not delay THE JOURNAL to accommodate some late proof or item.

The Editor wishes to express his unbounded gratitude to his Publication Committee, to all the numerous ones who have had duties in assembling special number material, and to the Council's each and every member who has made his work so enjoyable.

Again the Editor has found stimulation and enormous satisfaction in our friendly associations.

Respectfully submitted,
WILFRID HAUGHEY, M.D.
Editor

REPORT ON AND EVALUATION OF THE MSMS RHEUMATIC FEVER CONTROL PROGRAM—1956

CHRONOLOGY AND SALIENT FEATURES

April 26, 1945: Preventive Medicine Committee MSMS.—Extract of minutes: "The Preventive Medicine Committee respectfully recommends to the Executive Committee of the Council MSMS that the Chairman of the Child Welfare Committee, the Chairman of the Heart and Degenerative Disease Committee, the Director of the Michigan Crippled Children Commission, together with Secretary Foster confer for the purpose of expanding the program of education, control and care of the rheumatic fever patient and that the Committee's findings be submitted to the Council MSMS."

May 13, 1945: Special Rheumatic Fever Committee.—Extract of the minutes: "A rheumatic fever program should concern itself with (1) Education—lay and professional; (2) Research; (3) Case finding, diagnostic services, treatment and follow-up services and schooling facilities. This program is the combined effort of the Michigan State Medical Society and the Michigan Crippled Children Commission to provide adequate facilities for the finding, treatment and prevention of rheumatic fever. It is designed to keep the activity in the hands of the practicing profession with no disturbance of the established physician—patient relationship."

July 13-14, 1945: The Council MSMS.—The report of the meeting of May 13, 1945 of the Special Rheumatic Fever Committee was presented to the Council. After full discussion motion was made that the report of the Committee be received with thanks and that the Committee be commended for its efforts; carried unanimously.

September 6, 1945: Rheumatic Fever Control Committee.—First meeting of the Committee. Proposed Diagnostic and Consultation Centers: Marquette, Traverse City, Bay City, Grand Rapids, Lansing, Flint, Ann Arbor, Jackson and Kalamazoo.

Fundamental rules for Diagnostic and Consultation Centers:

1. The work shall be limited to diagnostic and consultation service only.
2. All reports and recommendations must go to a private doctor of medicine.
3. Indigents are the responsibility of the Michigan Crippled Children Commission. Private patients must be charged a fee.
4. Reporting shall be made of all cases to the Michigan Department of Health.
5. Uniform blanks shall be used by all Centers. Accurate records shall be kept, together with follow-up reports.
6. Definite follow-ups should be established and be included among the recommendations to the referring doctor of medicine.

January 17, 1946: Michigan Society for Crippled Children and Adults, Inc.—agrees to financial support on a year-to-year basis, beginning with the sum of \$15,000.00 for the year 1946.

January 18, 1947: Wayne County Medical Society Rheumatic Fever Control Committee appointed by the Society's President.

April 16, 1947: The Executive Committee of the Council establishes the principle of voluntary participation by County Medical Societies.

July 22, 1948: Medical Coordinator for the MSMS Rheumatic Fever Control Program recommended by the Rheumatic Fever Control Committee and approved by the Council, effective January 1, 1949.

January 5, 1949: Michigan Heart Association incorporated.

June 22, 1949: Michigan Heart Association offers

financial support on a year to year basis, beginning with \$32,515.72 for the year 1949.

May 10, 1950: Michigan Chapter of the Arthritis and Rheumatism Foundation makes Financial contribution of \$2,250.00.

May 2, 1951: Annual Postgraduate Fellowships for the Study of Rheumatic Fever established.

October 31, 1951: Series of "Physician's Desk Reference Cards for Rheumatic Fever begun.

1949-1954: New Rheumatic Fever Diagnostic and Consultation Centers organized: Alpena, Benton Harbor—St. Joseph, Muskegon, Saginaw, Sault Ste Marie, Royal Oak, Petoskey.

January 20, 1954: Health Department Participation in Heart Disease Control.—The Rheumatic Fever Control Committee and the Executive Committee of the Council (May 19, 1954): Approval of the general principles of Health Department participation in heart disease control. . . . Implementation to be framed within the needs and capabilities of each community as determined jointly between the local County Medical Society and the local Health Department, with participation of interested organizations.

September 8, 1954: Liaison with the Special Education Committee of the Michigan Department of Public Instruction established, for a study of the needs of the cardiac and the rheumatic child in school.

February 2, 1955: Penicillin Distribution.—Rheumatic Fever Control Committee and Executive Committee of the Council (February 23, 1955): (1) Statement of policy that the Rheumatic Fever Control Committee is a diagnostic and consultation service and it is not within its province to prescribe or distribute drugs; (2) that prophylaxis of rheumatic fever (recurrences) (by the use of penicillin) for the medical indigent should be handled similar to the present regulation governing distribution of gamma globulin, i.e., the drug used by the physician to be replaced by the local Health Department.

December 7, 1955: Michigan Crippled Children Commission Program of Rheumatic Fever Prophylaxis.—Under this plan the Michigan Crippled Children Commission will undertake to pay the physician—out of Trust Funds administered by the Commission—a standard fee of \$3.00 for the monthly administration of penicillin to rheumatic children under age 21 who qualify under the Crippled and/or Afflicted Children's Acts.

January 16, 1956: Distribution of Injectable Penicillin by the Health Department for the prevention of streptococcal infections in persons who have had rheumatic fever or who have rheumatic heart disease, on application by the family physician, and the Rheumatic Fever Prophylaxis Program of the Michigan Crippled Children Commission become effective.

FINANCIAL SUMMARY

<i>Expenditures</i>	
Total expenditures 1945-1956 incl. (12 years).....	\$205,785.87
Smallest annual expenditure (1945).....	520.30
Largest annual expenditure (1952).....	26,318.23
Average annual expenditure 12 years.....	17,788.45
Average annual expenditure last 10 years.....	20,534.90
<i>Financial Contributions by</i>	
Michigan Society for Crippled Children & Adults.....	58,140.14
Arthritis & Rheumatism Foundation.....	4,500.00
Michigan Heart Association.....	150,821.29

ACHIEVEMENTS IN EDUCATION

Lay Education:

1. Pamphlet entitled: "Rheumatic Fever. Nine Questions and Answers for Parents" prepared by the Rheumatic Fever Control Committee, printed and distributed

by the Michigan Department of Health. Approximately 50,000 copies.

2. Pamphlet entitled: "The Cardiac and the Rheumatic Child in School. Five Questions and Answers for Teachers," prepared jointly by the Rheumatic Fever Control Committee and the Committee on Education of Exceptional Children of the Michigan Department of Public Instruction, printed and published by the Rheumatic Fever Control Committee, distributed by the joint sponsors. 20,000 copies.

3. Numerous (untabulated talks on the subject of rheumatic fever for lay groups, such as Service Clubs, PTA Health Groups, Community Health Councils, and the like.

4. Radio and TV spot announcements in cooperation with the Michigan Heart Association. TV programs and interviews.

5. Liaison with the Committee on Education of Exceptional Children of the Department of Public Instruction.

6. Cooperation with the Michigan Heart Association's Heart Units.

Professional Education:

1. Series of "Physician's Desk Reference Cards for Rheumatic Fever," twenty topics related to the problems of rheumatic fever and rheumatic heart disease, with frequent revisions, prepared by the Rheumatic Fever Control Committee and distributed at intervals to all members of the Michigan State Medical Society.

2. Presentation of one or more scientific programs on rheumatic fever for twenty-seven County Medical Societies.

3. Presentations by outstanding national authorities on rheumatic fever, annually on Heart Day of the Michigan Clinical Institute.

4. Publication of scientific papers on Rheumatic Fever in THE JOURNAL OF THE MICHIGAN STATE MEDICAL SOCIETY.

5. Annual Postgraduate Fellowships for the Study of Rheumatic Fever, carrying a stipend of not to exceed \$500.00, awarded to date to twenty-three doctors of medicine who meet the Committee's requirements for applicants.

ACHIEVEMENTS IN RESEARCH

By decision of the Rheumatic Fever Control Committee (May 13, 1945), problems of research are to be left to other auspices.

ACHIEVEMENTS IN CASE FINDING

In the matter of case finding, one of the primary objectives of the Rheumatic Fever Control Program (May 13, 1945), the feature undertaking is the organization of the several Rheumatic Fever Diagnostic and Consultation Centers. The basic principles governing this project can be summarized as follows:

1. Rheumatic Fever Diagnostic and Consultation Centers shall be organized, controlled and operated by the local County Medical Society in cooperation with the MSMS Rheumatic Fever Control Committee.

2. The services rendered shall be consultative and diagnostic exclusively and the Centers shall not undertake treatment.

3. Patients shall be admitted to the Centers on direct referral by a physician exclusively.

4. The Centers shall not be "free" clinics. A standard fee for examination shall be charged. In the case of the medically indigent this charge may be paid by another party.

5. Reports and recommendations shall be forwarded to the referring physician for use at his discretion.

Acceptance.—The principle of Rheumatic Fever Diagnostic and Consultation Centers has been accepted by the County Medical Societies located in the cities listed in paragraph I, of this report. Only 3 important County Medical Societies (Calhoun, Genesee, St. Clair) have elected not to participate in the MSMS program.

Cumulative statistics, as of December 31, 1956, reflect the combined activity of all the MSMS Centers:

New Admissions	3,825
Diagnosed rheumatic fever/rheumatic heart disease....	1,394
Re-examinations and follow-up.....	2,602
Total examinations made.....	6,427

Analysis of the complete statistical report shows that there is extreme variability among the several Centers, from total inactivity to considerable progress. Three Centers (Grand Rapids, Kalamazoo, Traverse City) account for nearly 50 per cent of new admissions to the program. Among the reasons for this variability are: a genuine belief that there is no need for a diagnostic program; indifference to the problems of rheumatic fever; misunderstanding of the objectives of the project. The more successful County Medical Societies are to be commended for their important contribution to the MSMS program.

CONCLUSION

While it cannot be said that on a statewide basis the Rheumatic Fever Control Program of the MSMS has been 100 per cent successful, it is readily apparent that a great deal of progress has been made in the twelve years of its existence. There is now much more awareness of and interest in the problems of rheumatic fever and of rheumatic heart disease, both on the part of the medical profession and on the part of the public, than there was in 1945. This, of course, is the implied final objective of the project. The progress made in the past few years should not be allowed to regress, but a continued sustained effort should be maintained for its enlargement.

The success of a program such as this reflects favorably upon the Michigan medical profession in the eyes of the public.

RECOMMENDATIONS

Your medical coordinator respectfully submits the following recommendations for consideration by the Council:

1. Continuation and expansion of the MSMS Rheumatic Fever Control Program as presently constituted and as guided by the Rheumatic Fever Control Committee; i.e., (a) education, both lay and professional; (b) diagnostic and consultation service to the practicing physician at his request.

2. Moral support and continued financial assistance to those Rheumatic Fever Centers which are now actively engaged in rheumatic fever control and desire to continue and expand their programs.

3. Maintaining an open door to those Medical Societies who may wish to participate in the MSMS program at a later date.

4. Financial support of the Postgraduate Education Program (Postgraduate Fellowships) and extension of this program to attendance at recognized rheumatic fever centers elsewhere in the U.S.A., without formal course, in selected cases.

5. Maintaining the position of Medical Coordinator on either a full-time or a part-time basis, with the provision that the medical coordinator shall reside in the Southeastern part of the State, for the reason that most doctors and a large segment of the population are concentrated in that area.

ANNUAL SESSION OF THE COUNCIL

6. Maintaining good relations and cooperation with the Rheumatic Fever Programs of the Michigan Crippled Children Commission and of the Michigan Department of Health.

7. Maintaining good relations and cooperation with the Michigan Heart Association, which not only supports the MSMS program financially, but is itself a

voluntary organization engaged in the fight against heart disease, and has delegated the major share of its interest in the problems of rheumatic fever to the Michigan State Medical Society.

Respectfully submitted,
LEON DeVEL, M.D.
Medical Coordinator

MSMS RHEUMATIC FEVER CONTROL COMMITTEE

Statistical Report from January 1, 1956, to December 31, 1956

	*Total Register Jan. 1, 1956				Jan. 1, 1956, to Dec. 31, 1956				*Total Register Dec. 31, 1956			
	No. Adm.	Rh. F.	Reex.	Total	No. Adm.	Rh. F.	Reex.	Total	No. Adm.	Rh. F.	Reex.	Total
Center**	125	53	25	150	14	11	5	19	139	64	30	169
Alpena (19)	225	197	265	490	18	34	62	80	243	231	327	570
Ann Arbor (6)	219	80	89	308	10	5	3	13	229	85	92	321
Bay City (9)	25	8	4	29	0	0	0	0	25	8	4	29
Benton Harbor (14)	277	45	6	283	35	9	2	37	312	54	8	320
Detroit-Wayne (1)	677	261	496	1173	45	14	33	78	722	275	529	1251
Grand Rapids (3)	136	45	28	164	3	3	0	3	139	48	28	167
Jackson (15)	528	168	567	1095	60	15	67	127	588	183	634	1222
Kalamazoo (10)	107	13	20	127	8	0	0	8	115	13	20	135
Lansing (5)	—	—	—	—	INACTIVE				—	—	—	—
Marquette (8)	245	79	195	440	6	4	10	16	251	83	205	456
Muskegon (11)	23	21	16	39	INACTIVE				23	21	16	39
Petoskey (18)	239	55	88	327	16	5	6	22	255	60	94	349
Pontiac-Royal Oak (2)	91	27	8	99	INACTIVE				91	27	8	99
Saginaw (7)	—	—	—	—	INACTIVE				—	—	—	—
Sault Ste. Marie (17)	647	199	552	1199	46	43	55	101	693	242	607	1300
Traverse City (13)	—	—	—	—	—	—	—	—	—	—	—	—
TOTALS	3564	1251	2359	5923	261	143	243	504	3825	1394	2602	6427

*Cases and examinations on record from the beginning of the Center's activities.

**Number indicates rank of importance according to population.

UNORGANIZED CENTERS: Battle Creek (12)
Flint (4)
Port Huron (16)

MSMS 1957 BUDGET ESTIMATES

GENERAL FUND

ACCOUNT TITLE	1957 Estimate
INCOME	
5250 members @ \$55.00.....	\$288,750.00
Less: \$1.50 to THE JOURNAL.....	7,875.00
\$6.25 to Public Education.....	32,812.50
\$3.50 to Public Service.....	18,375.00
\$5.25 to Professional Relations.....	27,362.50
\$5.00 to MSMS New Headquarters Fund.....	26,250.00
\$2.00 to Building Maintenance Fund.....	10,500.00
\$3.00 to Public Education Reserve.....	15,750.00
Balance to General Fund @ \$28.50.....	\$149,625.00
Interest and Miscellaneous Income.....	—0—
TOTAL FUNDS AVAILABLE.....	\$149,625.00
EXPENSES (Administrative and General)	
Printing, Mailing and Postage.....	\$ 10,000.00
Office Supplies.....	3,000.00
Insurance and Bonds.....	5,000.00
Auditing.....	750.00
Salaries: Administrative and Office.....	37,000.00
General Counsel Retainer and Expense.....	7,000.00
Equipment and Repairs.....	3,500.00
Telephone and Telegraph.....	4,000.00
Taxes (Other than Property).....	2,500.00
Miscellaneous Expenses and Contributions.....	3,000.00
Employee's Retirement Trust.....	10,000.00
Resident's and Interns Conference.....	—0—
Total Administrative and General Expense.....	\$ 85,750.00
EXPENSES (Society Activities)	
Council Expense.....	\$ 15,000.00
AMA Delegates and Alternates.....	7,000.00
General Society Travel and Entertainment.....	7,200.00
Officers Travel.....	6,200.00
Secretary's Letters and Office Expense.....	900.00
Woman's Auxiliary.....	600.00
Dues Collection Expense.....	3,000.00
Total Society Activities.....	\$ 39,900.00
EXPENSES (Committees)	
Cancer Coordinating Committee.....	\$ 1,000.00
Child Welfare Committee.....	400.00
National Defense.....	400.00

Geriatrics.....	500.00
Industrial Health.....	100.00
Legislative.....	1,500.00
Maternal Health.....	400.00
Mental Health.....	400.00
Michigan Health Council.....	10,000.00
Postgraduate Medical Education.....	4,000.00
Preventive Medicine.....	100.00
Permanent Conference.....	100.00
Rural Medical Service.....	200.00
Scientific Radio.....	1,400.00
Tuberculosis Control.....	200.00
Veneral Disease.....	100.00
Beaumont Memorial Restoration.....	500.00
Highway Accident Committee.....	400.00
Sundry Committee Expense.....	2,000.00
Total Committee Expense.....	\$ 23,700.00
TOTAL GENERAL FUND EXPENSES.....	\$149,350.00
GAIN FOR THE YEAR.....	275.00
BALANCE FROM PRIOR YEARS.....	89,870.56
	\$ 90,145.56
NET GAIN OR LOSS FROM ANNUAL SESSION, MCI AND JOURNAL.....	
BALANCE TO 1958.....	\$ 90,145.56

BUILDING MAINTENANCE FUND

INCOME	
Allocation from membership dues.....	\$ 10,500.00
EXPENSES	
Maintenance: Utilities, Decorating, supplies, yard work, etc.....	\$ 3,000.00
Salaries: Janitor.....	2,000.00
Property Taxes.....	850.00
Insurance: Fire and Liability.....	500.00
Depreciation.....	1,750.00
Furnishings.....	200.00
Remodeling.....	200.00
Parking Area.....	—0—
Miscellaneous.....	—0—
Total Building Maintenance Expense.....	\$ 8,500.00
GAIN FOR THE YEAR.....	2,000.00
BALANCE FROM PRIOR YEARS.....	14,124.94
BALANCE TO 1958.....	\$ 16,124.94

ANNUAL SESSION OF THE COUNCIL

ANNUAL SESSION

INCOME	
Booth Sales: 132 Spaces.....	\$ 29,000.00
EXPENSES	
Scientific Meeting Expense.....	\$ 4,500.00
Exhibit Expense	5,000.00
Registration and Hotel Expense.....	800.00
State Society and Officers Night.....	4,200.00
Promotion: Printing, Mailing, Postage and Scientific	
Work Committee	3,300.00
Press Expense	1,400.00
Salaries	8,000.00
House of Delegates Expense (including Special Guests)...	2,200.00
Miscellaneous Expense	1,600.00
Total Annual Session Expense.....	\$ 31,000.00

MSMS NEW HEADQUARTERS FUND

INCOME	
Allocation from membership dues.....	\$ 26,250.00

CONTINGENT FUND

INCOME	
Allocation from membership dues.....	\$ —0—
Balance from prior years.....	53,614.34
Total	\$ 53,614.34

MICHIGAN CLINICAL INSTITUTE

INCOME	
Booth Sales: 74 Spaces.....	\$ 13,650.00
EXPENSES	
Scientific Meeting	\$ 2,500.00
Exhibit Expense	3,500.00
Registration and Hotel.....	900.00
Promotion: Printing, Mailing, Postage and Committee	
meetings	3,300.00
Press Expense	1,300.00
Salaries	1,950.00
Residents and Interns Conference.....	—0—
Miscellaneous Expenses	200.00
Total MCI Expense.....	\$ 13,650.00

THE JOURNAL

INCOME	
Allocation from membership dues.....	\$ 7,875.00
Subscriptions—non-members	800.00
Advertising Sales	80,000.00
Reprint and Cut Sales	4,000.00
Miscellaneous Income	100.00
Total Income	\$ 92,775.00
EXPENSES	
Editor's Expense	\$ 3,000.00
Printing, Mailing and Postage.....	54,000.00
Reprint and Cut Expense.....	3,500.00
Salaries	14,550.00
Discounts and Commissions.....	19,400.00
Miscellaneous Expenses	125.00
Total Expenses	\$ 94,575.00

PUBLIC EDUCATION RESERVE

INCOME	
Allocation from membership dues.....	\$ 15,750.00
Balance from prior years.....	57,245.00
Total	\$ 72,995.00

PUBLIC SERVICE ACCOUNT

INCOME	
Allocation from membership dues	\$ 18,375.00
EXPENSES	
Salaries	\$ 18,150.00
Telephone and Telegraph	1,000.00
Travel and Entertainment	5,000.00
Rural Health Conference	250.00
Miscellaneous Expense	—0—
Committee meetings	100.00
Total Expenses	\$ 24,500.00
LOSS FOR THE YEAR	6,125.00
BALANCE FROM PRIOR YEARS	3,675.16
BALANCE TO 1958 (Loss).....	\$ 2,449.84

PUBLIC EDUCATION ACCOUNT

INCOME	
Allocation from membership dues	\$ 32,812.50
Other Income	—0—
Total Income	\$ 32,812.50
EXPENSES	
Committee meetings	\$ 500.00
Equipment and Repairs	500.00
Printing, Mailing and Postage.....	2,500.00
Office Supplies	1,000.00
Salaries	18,350.00
Telephone and Telegraph	1,500.00
Travel and Entertainment	5,000.00
Exhibit Expenses	1,000.00
Publications, Pamphlets, clippings	1,000.00
Radio, TV and Cinema	10,000.00
Miscellaneous Expense	600.00
Total Expenses	\$ 41,950.00
LOSS FOR THE YEAR	\$ 9,137.50
BALANCE FROM PRIOR YEARS	\$ 73,891.87
BALANCE TO 1958	\$ 64,754.37

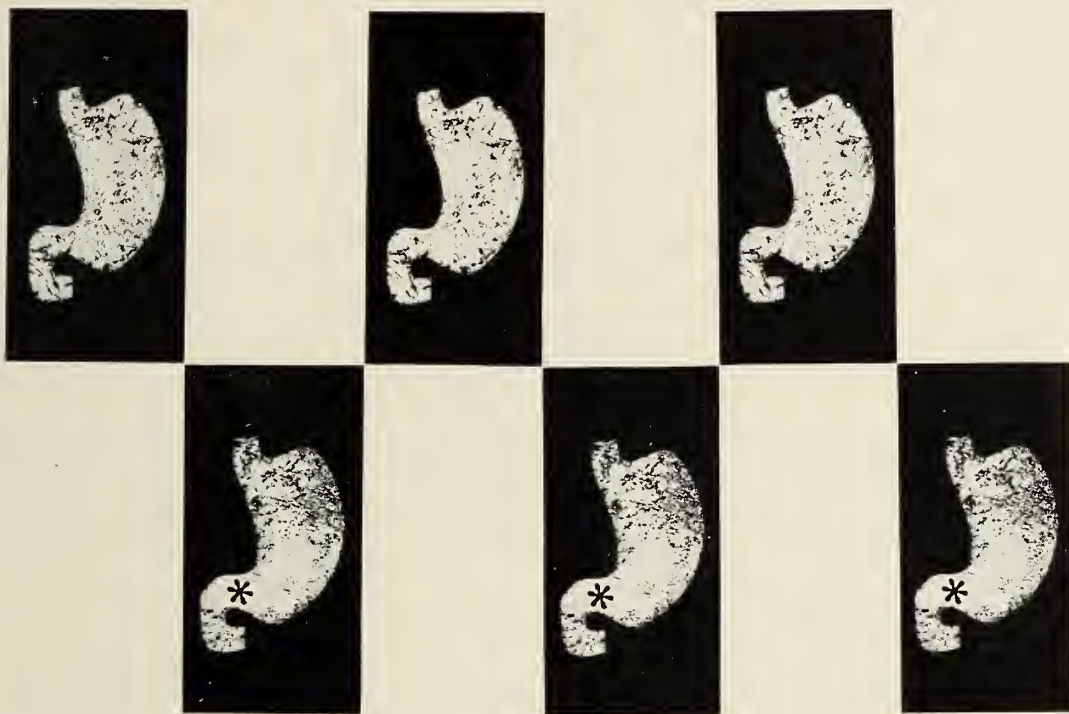
PROFESSIONAL RELATIONS

INCOME	
Allocation from membership dues	\$ 27,562.50
EXPENSES	
Rent to Wayne County Medical Society	\$ 720.00
Salaries	18,150.00
Telephone and Telegraph	1,000.00
Travel and Entertainment	5,000.00
National Meeting Expense	2,000.00
County Secretary's—PR Conference	6,000.00
County Society and Field Secretary meetings	1,000.00
Woman's Auxiliary	1,000.00
Miscellaneous Expenses	100.00
Committee Meetings	—0—
Printing, Mailing and Postage	750.00
Total Expenses	\$ 35,720.00
LOSS FOR THE YEAR	8,157.50
BALANCE FROM PRIOR YEARS	4,897.50
BALANCE TO 1958 (Loss).....	\$ 3,260.00

RHEUMATIC FEVER CONTROL PROGRAM

INCOME	
From Michigan Heart Association	\$ 39,574.44
EXPENSES (Central Office)	
Committee meetings	\$ 500.00
Equipment and Repairs	2,500.00
Payroll Taxes	300.00
Printing, Mailing and Postage	1,750.00
Office Supplies	200.00
Publications and Pamphlets	100.00
Salaries: Administrative and Office.....	11,600.00
Travel	1,500.00
Fellowships	3,000.00
Telephone and Telegraph	100.00
Laboratory Aid Plan	1,000.00
Travel Fellowships	3,000.00
Annual Rheumatic Fever Day	4,000.00
Circulating Exhibits	3,000.00
Total Central Office Expense	\$ 32,550.00
EXPENSES (Control Centers)	
Alpena	\$ 500.00
Ann Arbor	1,500.00
Bay City	1,000.00
Benton Harbor	200.00
Detroit	4,000.00
Grand Rapids and Muskegon	4,000.00
Jackson	100.00
Kalamazoo	1,500.00
Lansing	100.00
Petoskey	100.00
Pontiac and Royal Oak	200.00
Saginaw	200.00
Sault Ste. Marie	100.00
Traverse City	1,200.00
Total Control Center Expenses	\$ 14,700.00
Total Rheumatic Fever Expenses	47,250.00
LOSS FOR THE YEAR	7,675.56
BALANCE FROM PRIOR YEARS	\$ 7,675.56

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SEARLE

Michigan's Department of Health

Albert E. Heustis, M.D., Commissioner

IN-SERVICE TRAINING IMPROVES HEALTH PROGRAM

Continuing and intensive in-service training for personnel of local and state health departments in Michigan is carried on by the Michigan Department of Health.

All of the specialties involved in the program of the Michigan Department of Health, administration, public health dentistry, public health nursing, sanitation, occupational health, laboratory, statistics, nutrition, health education and clerical work, are represented on the Co-ordinating Committee that conducts the training program. Dr. J. K. Atland, Director of the Division of Local Health Administration, is chairman of this committee. Working under the Co-ordinating Committee are technical committees in each specialty, headed by division directors or section chiefs of the state department and made up of representatives of state and local health departments and interested individuals. The technical committees are responsible for recruitment as well as training.

Much of the in-service training is informal and non-accredited, covering a broad scope of interests. A total of 1,250 state and local health department workers took part in some way in activities sponsored in 1955-56. Examples of non-accredited training offered this year were: institutes of varying length on subjects such as long-term illness; workshops for local health department nurses, sanitarians and clerks; courses in public administration for supervisory personnel and courses for water and sewage treatment plant operators.

In the accredited training program, a limited number of fellowships for advanced study are available each year to state and local health department personnel. In general, the fellowships are considered a bonus given to persons already in the field of public health who have demonstrated a capacity for growth and a dedication to their work. The grants are not used as a means of recruiting new persons for the profession. The training enables a person to fill a need identified as important in the position which he holds.

About fifteen persons receive the one-year fellowships awarded annually. Winners of the grants this year included public health physicians, nurses, sanitarians and laboratorians. Most of the fifteen are studying toward master's degrees in public health at the School of Public Health of the University of Michigan.

Persons applying for fellowships are first screened by the technical committees. On the basis of its findings, each committee makes recommendations to the Co-ordinating Committee on the applicants in its specialty.

In its final choice of candidates to be recommended to the State Health Commissioner for fellowships, the Co-ordinating Committee works through a Fellowship

Selection Committee. On this committee are representatives of the specialties found in the Michigan Department of Health and also local health department staff members.

The Fellowship Selection Committee interviews all applicants and on the basis of its findings and the recommendations of the technical committees submits names to the State Health Commissioner in the order of choice. The Commissioner makes final selections.

The state-administered program of advanced training is independent of the fellowship program being conducted by the U. S. Public Health Service. Goal of the federal program is to attract newcomers to the field of public health. The two programs are supplementary and have the single objective of meeting the demands for more and better qualified public health personnel.

VENEREAL DISEASE POSTGRADUATE CONFERENCE

The 26th Venereal Disease Postgraduate Conference for physicians sponsored by the University of Tennessee College of Medicine, the Public Health Service and the Tennessee State Department of Health will be held at the College of Medicine in Memphis, April 18-20. No tuition will be charged. Applications for admission are to be sent to Dr. Henry Packer, Department of Preventive Medicine, College of Medicine, University of Tennessee, Memphis 3, Tennessee.

PROPHYLACTICS FOR EYES OF NEWBORN

Frequent inquiries are received from physicians as to prophylactics to be used in the eyes of newborn infants.

Michigan law requires the State Health Commissioner "to officially name and approve a prophylaxis to be used in treating the eyes of newly born infants."

In compliance with this law, the State Council of Health approved silver nitrate, 1.0 per cent in solution, as the prophylactic to be used in every child's eyes immediately after birth.

A change in regulations concerning eye prophylaxis was made in 1953. The use of prophylactics other than silver nitrate may be permitted under controlled research conditions when such research studies have been previously approved by the State Health Commissioner.

In an analysis of 1,000 cases of pelvic cancer, *physician delay* was established in 158, and delay on the part of both physician and patient in 437.

* * *

It seems incredible that any medical graduate would not know that postmenopausal or intermenstrual bleeding might and often does mean cancer, and that only a proper examination can throw light on the cause of the bleeding.

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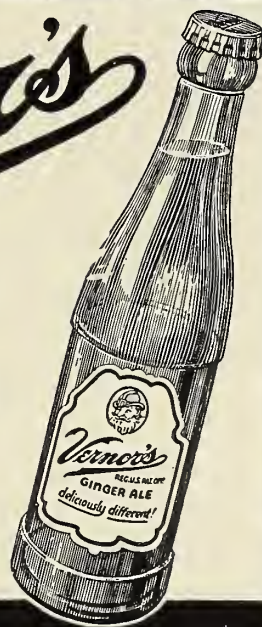
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In Memoriam

Jacob D. Brook, M.D., eighty, of Grandville, died December 20, 1956, at Grand Rapids.

Doctor Brook was a Past President of the Michigan State Medical Society, having served as chief executive in 1929.

Born in 1877 at Cleveland, Ohio, Doctor Brook came to Grandville in 1892. After receiving his M.D. degree from Detroit College of Medicine (now Wayne State University) in 1902, he began general practice in Grandville and continued for twenty-nine years until he became Kent County's first fulltime health officer.

Doctor Brook also served as President of the Kent County Medical Society, the Michigan State Board of Registration in Medicine and the Michigan Public Health Association. He was a member of the American Medical Association and served as Michigan delegate to the AMA House of Delegates for twenty-four years.

* * *

Samuel Balofsky, M.D., forty-seven, Detroit, Associate Professor of Radiology at Wayne State University College of Medicine, was a member of Wayne County Medical Society and a staff member at Receiving and Detroit Memorial Hospitals, Detroit. Dr. Balofsky died August 11, 1956.

* * *

Robert Beattie, M.D., eighty-five, retired Detroit physician, was a 1903 graduate of the Detroit College of Medicine (Wayne University). He had practiced in Detroit fifty-two years before he retired in 1955. He was a member of the Wayne County Medical Society and a Life Member of the Michigan State Medical Society. He died August 18, 1956.

* * *

Robert J. Biggar, M.D., forty-seven, formerly of Port Huron, was chief medical officer for the California Texas Oil Company, Ltd. He received his M.D. degree from the Detroit College of Medicine (Wayne University) in 1936. He was a member of the St. Clair County Medical Society. He died September 21, 1956.

* * *

P. W. Butterfield, M.D., forty-seven, pathologist at Alpena General Hospital, Alpena, was born in 1909 in East Wilton, Maine. He received his M.D. degree from Boston University Medical School, and had practiced in Alpena for three years. He died October 19, 1956.

* * *

Wm. A. Evans, M.D., forty-nine, Detroit physician for more than twenty years, was a native of Bellaire, and had lived in Detroit for forty-five years. He was graduated from the Johns Hopkins Medical School, and was

a member of the Wayne County Medical Society. He died October 17, 1956.

* * *

Daniel P. Foster, M.D., sixty-four, Detroit, head of Henry Ford Hospital's metabolism department, received his M.D. degree from Harvard Medical School in 1922. Dr. Foster was a member of the Wayne County Medical Society. He died August 21, 1956.

* * *

Leonard Fox, M.D., thirty-three, of Wyandotte, was born in Canada. Dr. Fox graduated from the University of Michigan Medical School in 1945. He had practiced in Wyandotte for four years. He died October 7, 1956.

* * *

John R. Giffen, M.D., eighty-five, practitioner in Bangor for over sixty years, was born in Mayfield, Ontario, Canada, in 1870. He received his M.D. degree at Willamette University, Willamette, Oregon. Dr. Giffen was a member of the Van Buren County Medical Society, and an Emeritus Member of the Michigan State Medical Society. He died July 24, 1956.

* * *

W. T. S. Gregg, M.D., eighty-five, of Eagle Harbor, practicing physician for over half a century, was born in 1871, in Southfield, Michigan. Dr. Gregg retired from practice in 1946. He was a member of the Houghton-Baraga-Keweenaw County Medical Society and an Emeritus Member of the Michigan State Medical Society. He died July 15, 1956.

* * *

Arthur J. Hamilton, M.D., fifty-eight, of Flint, was born in 1898, in Tecumseh. He was graduated from the University of Tennessee Medical School. He was a member of the Genesee County Medical Society, and had practiced in Detroit prior to coming to Flint ten years ago. He died August 11, 1956.

* * *

William Hamilton, M.D., sixty-six, of Highland Park, was born near Huntsville, Ontario. Dr. Hamilton received his M.D. degree from the University of Toronto in 1916. He had practiced in Detroit for forty years following his graduation. He died August 2, 1956.

* * *

Robert B. Hasner, M.D., seventy-two, of Royal Oak, was born in Independence, Iowa. Dr. Hasner received his M.D. degree from Rush Medical College. He had practiced medicine in Royal Oak for thirty-five years. He was a Past President of the Oakland County Medical Society, and a Life Member of the Michigan State Medical Society. He died September 16, 1956.

Arthur R. Hayton, M.D., seventy-eight, practicing physician in Shelby since 1905, was born in New York City in 1878. He received his M.D. degree from the University of Illinois in 1905. He was a member of the Oceana County Medical Society and a Life Member of the Michigan State Medical Society. He died December 27, 1956.

* * *

Ara B. Hewes, M.D., eighty-two, well-known Adrian physician and surgeon, was born in 1873, at Medina, Ohio. He received his M.D. degree from the Cleveland Homeopathic Medical College in 1903. Dr. Hewes had practiced in Adrian for more than fifty years, beginning his first practice here in 1903. He was a Past President of the Lenawee County Medical Society. He died July 30, 1956.

* * *

J. E. Hopkins, M.D., fifty-nine, Detroit, staff physician at Lincoln Hospital, was born in Canada. Dr. Hopkins received his M.D. degree from the University of Toronto Medical School. He was a member of the Wayne County Medical Society. He died suddenly November 25, 1956.

* * *

Ralph G. Hubbard, M.D., fifty-eight, of Detroit, was born in New Baltimore. Dr. Hubbard had lived in Detroit since 1915. He was graduated from the University of Michigan Medical School in 1926. He was a member of the Wayne County Medical Society and an Associate Member of the Michigan State Medical Society. He died August 31, 1956.

* * *

E. S. Huckins, M.D., sixty-four, Bay City practitioner since 1916, was born in Bay City in 1892. He was graduated from the University of Cincinnati Medical School in 1915. He was a Past President of the Bay County Medical Society and a Retired Member of the Michigan State Medical Society. He died December 29, 1956.

* * *

Ned B. Kalder, M.D., forty-three, Chief of Staff at Mt. Carmel Mercy Hospital, Detroit, was a member of Wayne County Medical Society. He died in a traffic accident July 15, 1956.

* * *

John L. Loomis, M.D., retired member of the Muskegon County Medical Society, was graduated from the University of Pennsylvania Medical School, and practiced in Muskegon, Michigan, until illness forced his retirement. He died May 1, 1956, in Santa Ana, California.

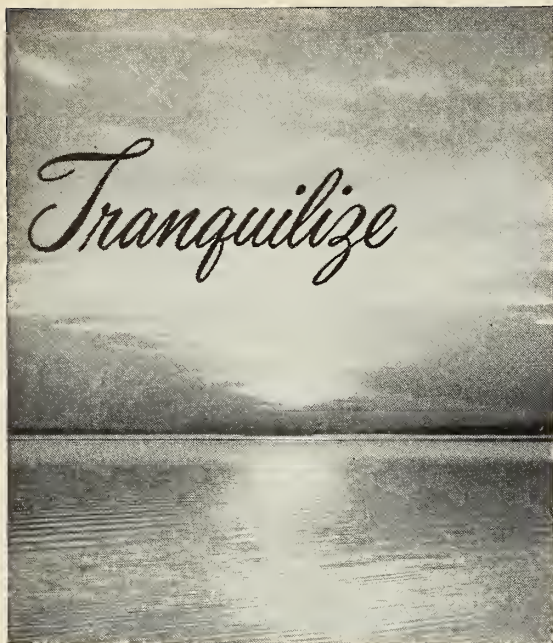
* * *

J. L. McKenna, M.D., fifty-four, Grand Rapids physician and surgeon, was a native of Ionia. Dr. McKenna had been a resident of Grand Rapids most of his life, receiving his M.D. degree from the University of Michigan in 1926. He was a member of the Kent County Medical Society. He died August 25, 1956.

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Henry G. Merz, M.D., eighty-six, of Lapeer, was born in 1869 at Castroville, Texas. He graduated from Homeopathic College, Chicago, in 1892. He had practiced medicine for sixty-four years; in Lapeer, for the past thirty-one years. He was a member of the Lapeer County Medical Society and an Emeritus Member of the Michigan State Medical Society. He died September 22, 1956.

* * *

John P. Parsons, M.D., sixty-seven, of Grosse Pointe Park, was a native of Eau Claire, Wisconsin. Dr. Parsons was graduated from the University of Michigan Medical School in 1919. He had practiced in Detroit since 1934, and was a member of the Wayne County Medical Society. He died September 17, 1956.

* * *

Edwin M. Smith, M.D., sixty, Grand Rapids physician since 1926, was born near Brown City. He received his M.D. degree from the University of Michigan, and was a member of the Kent County Medical Society. He died August 3, 1956.

* * *

W. C. Swartout, M.D., seventy-six, of Muskegon, a medical practitioner for more than fifty years, was born in 1880 at Chicago. Dr. Swartout was graduated from the University of Illinois School of Medicine and practiced in Chicago prior to coming to Muskegon in 1919. He was a Life Member of the Michigan State Medical Society, and a member of the Muskegon County Medical Society. He died October 22, 1956.

* * *

John J. Walch, M.D., sixty-nine, of Escanaba, retired physician and surgeon, was born in 1887 in Escanaba. He received his M.D. degree from the University of Michigan in 1912. He had practiced in Escanaba from 1915 until his retirement. Dr. Walch was a Past President of the Delta-Schoolcraft County Medical Society and a long-time member of the MSMS House of Delegates. He died September 5, 1956.

* * *

Harold W. Wiley, M.D., sixty-seven, of Lansing, director of procurement and distribution of blood for Michigan Department of Health since 1952, was born in 1889, in Lansing. Dr. Wiley obtained his M.D. degree from the University of Michigan. He was in private practice in Lansing for twenty-seven years until 1950. Doctor Wiley was a Past President of the Ingham County Medical Society and former Delegate from Ingham County to the MSMS House of Delegates. He died suddenly July 15, 1956.

Just as other disease processes has been coped with when not every mechanism of their induction was understood, so advantage must be taken of the existing knowledge of environmental cancers.

Correspondence

Dear Mr. Burns:

I have just returned from the National Trauma Committee Meeting of the American College of Surgeons which was held in Cleveland on the 1st and 2nd of February.

I am very pleased to report that for the sixth time in the past seven years the Michigan report on educational activities concerned with trauma was given first place. Credit for this achievement must be given to all of the Michigan physicians who co-operated so well in all of the educational activities of this committee, and especially to the many local committee chairmen who sponsored such fine programs throughout the year.

I want to thank you very kindly for your help in publishing some of our trauma papers in the August issue on Trauma and for the fine publicity which you gave us throughout the year in the State Journal. It is the hope of the Trauma Committee that you will continue to aid our efforts and that we may remain in first place when the National Committee meets next year in Florida.

Sincerely yours,
HOMER M. SMATHERS, M.D.,
Chairman, Michigan Regional
Committee on Trauma,
American College of Surgeons

Detroit, Michigan
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MICHIGAN AUTHORS

Henry J. Montoye, Ph.D., Wayne D. Van Huss, Ph.D., Herbert Olson, M.S., Andrew Hudec, M.S. and Earl Mahoney, M.S., East Lansing, are the authors of an article entitled "Study of the Longevity and Morbidity of College Athletes" published in *The Journal of the American Medical Association*, November 17, 1956.

R. W. Waggoner, M.D., Ann Arbor, is the author of an article entitled "History of the Department of Psychiatry at the University of Michigan," presented before the Sixth Triennial Medical Alumni Conference in Ann Arbor, September, 1956, and published in *University of Michigan Medical Bulletin*, October, 1956.

Thomas Francis, Jr., M.D., Ann Arbor, is the author of an article entitled "Approaches to the Prevention of Poliomyelitis," published in the *University of Michigan Medical Bulletin*, October, 1956.

Ross V. Taylor, M.D., Jackson, is the author of an article entitled "Amebiasis Treated with Bialllylamicol Hydrochloride," published in the *American Journal of Gastroenterology*, December, 1956.

R. Patterson, M.D., and W. A. Gracie, M.D., Ann Arbor, are the authors of an article entitled "The Rapid Approximation of Plasma Glucose by Means of Indicator Tape," published in the *University of Michigan Medical Bulletin*, October, 1956.

John S. De Tar, M.D., Milan, is the author of an article published in *GP* for November, 1956, which is the text of the Dedication Address given on September 1, 1956, at the formal dedication of the new national headquarters building of the Academy for General Practice, of which Dr. De Tar is President.

Robert S. Knighton, M.D., and J. DeWitt Fox, M.D., Detroit, are the authors of an article entitled "Diagnosis and Treatment of Eosinophilic Granuloma of Skull," published in *The Journal of the American Medical Association*, December 1, 1956.

John T. Ferguson, M.D., Frank V. Z. Linn, M.D., John A. Sheets, Jr., M.D., and Mervyn M. Nickels, M.D., Traverse City, are the authors of an article entitled "Methylphenidate (Ritalin) Hydrochloride Parenteral Solution," published in *The Journal of the American Medical Association*, December 1, 1956.

H. G. Kobrak, M.D., Detroit, is the author of an article entitled "Objective Audiometry," which was published in the *AMA Archives of Otolaryngology*, January, 1957.

Irving Shapire, M.D., Ann Arbor, is the author of an article entitled, "Radioactive Phosphorus in Differential Diagnosis of Ocular Tumors," presented at the scientific session following the Third National Cancer

Conference, Thursday, June 7, 1956, Ann Arbor, and published in *AMA Archives of Ophthalmology*, January, 1957.

M. K. Newman, M.D., Detroit, is the author of an article entitled, "Electromyography in Neurological Diagnosis," appearing in the *Annals of Rehabilitation*, Vol. III, Mexico City, Mexico.

Edward W. Kelly, Jr., M.D., and Hermann Pinkus, M.D., Detroit, are the authors of an article entitled "Local Application of 8-Methoxypsoralen in Vitiligo," published in the *Journal of Investigative Dermatology*, December, 1955.

Rosie Hunter, Herman Pinkus, M.D., and Catherine Heise Steele, M.D., Detroit, are the authors of an article entitled, "Examination of the Epidermis by the Strip Method," published in the *Journal of Investigative Dermatology*, July, 1956.

Hermann Pinkus, M.D., Monroe, and James R. Rogin, M.D., and Perry Goldman, M.D., Detroit, are the authors of an article entitled "Eccrine Poroma" and published in *AMA Archives of Dermatology*, November, 1956.

Hermann Pinkus, M.D., and Catherine Heise Steele, M.D., Detroit, are the authors of an article and exhibit entitled "Structure and Dynamics of the Human Epidermis," published in *AMA Scientific Exhibits*, 1955, Grune and Stratton, Publishers. The exhibit was shown at the American Academy of Dermatology and Syphilology, Chicago in 1954 and at the AMA meeting, Atlantic City in 1955, where it received Honorable Mention in the Section of Dermatology.

Carey P. McCord, M.D., Ann Arbor, is the author of an article entitled, "The Blind Hog in the British Isles," published in *Industrial Medicine and Surgery*, January, 1957.

W. E. Rush, M.D., J. P. Truant, M.D., J. C. Sieracki, M.D., and G. Manson, M.D., Detroit, are the authors of an article entitled "Actinomycosis-Cerebral Infection Presenting as a Brain Tumor," published in *Henry Ford Hospital Medical Bulletin*, December, 1956.

Shirley A. Johnson, Ph.D., M. June Caldwell, B.A., and Edward McCall Priest, M.D., Detroit, are the authors of an article entitled, "The Effect of the Administration of the Anticoagulant Marcumar on the Blood Coagulation Mechanisms," published in *Henry Ford Hospital Medical Bulletin*, December, 1956.

Robert F. Ziegler, M.D., Detroit, is the author of an article entitled "The Electrocardiogram in Interatrial Septal Defect," presented before the VIIIth International Congress of Pediatrics, Copenhagen, Denmark, July, 1956, and published in *Henry Ford Hospital Medical Bulletin*, December, 1956.

Fred W. Whitehouse, M.D., Detroit, is the author of an article entitled, "The Clinical Value of the Plasma Acetone Test," published in the *Henry Ford Hospital Medical Bulletin*, December, 1956.

Joseph Beninson, M.D., Detroit, is the author of an article entitled "Preliminary Report on the use of a Pressure Gradient, Elastic Support in Conditions Associated with Impaired Vascular Reserve," presented before the Central States Dermatological Association, Henry Ford Hospital, April, 1956, a résumé of which is published in the *Henry Ford Hospital Medical Bulletin*, December, 1956.

Hugh W. Brenneman, Lansing, is the author of an article entitled "Are Professions on Their Way Out?" published in *The New Physician*, January, 1957.

J. Chandler Smith, M.D., Saginaw, is the author of an article entitled "The Treatment of Cancer of the Breast," published in *Surgery, Gynecology and Obstetrics*, January, 1957.

E. R. Jennings, M.D., and J. W. Landers, M.D., Detroit, are the authors of an article entitled "The Use of Frozen Section in Cancer Diagnosis," published in *Surgery, Gynecology and Obstetrics*, January, 1957.

A. Waite Bohne, M.D., and Dale R. Drew, M.D., Detroit, are the authors of an article entitled "A Comparative Evaluation of Intravenous Pyelographic Media," published in *AMA Archives of Surgery*, December, 1956.

Robert C. Hendrix, M.D., Ann Arbor, is the author of an article entitled "Neoplasm in Children: A Review of Necropsy Records in 244 Cases," published in *University of Michigan Medical Bulletin*, November, 1956.

John G. Batsakis, M.D., Ann Arbor, is the author of an article entitled "Calcospherites and Thyroid Carcinoma," published in the *University of Michigan Medical Bulletin*, November, 1956.

Robert M. Nalbandian, M.D., Seymour Gordon, M.D., Ruth Campbell, M.D., and J. M. Kaufman, M.D., are the authors of an article entitled "A New Quantitative Digitalis Tolerance Test," published in *Harper Hospital Bulletin*, November-December, 1956.

Maria Huebbe, M.D., and Irving F. Burton, M.D., Detroit, are the authors of an article entitled "Tuberculosis of the Cervical Lymph Glands," published in *Harper Hospital Bulletin*, November-December, 1956.

William S. Carpenter, M.D., and Paul J. Connolly, M.D., Detroit, are the authors of an article entitled "Surgical Treatment of Ulcerative Colitis," published in *Harper Hospital Bulletin*, November-December, 1956.

B. Berglund, M.D., and A. Kohlmeier, M.D., Detroit, are the authors of an article entitled "An Analysis of Fatality," published in *Harper Hospital Bulletin*, November-December, 1956.

E. S. Gurdjian, M.D., F.A.C.S., and J. E. Webster, M.D., F.A.C.S., Detroit, are the authors of an article entitled "Experiences in the Surgical Management of Intracranial Suppuration," published in *Surgery, Gynecology and Obstetrics*, February, 1957.

Donald C. Durman, M.D., Saginaw, is the author of an article entitled "Metatarsus Primus Varus and Hallux Valgus," read before the Section on Orthopedic

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1. Pollock, B. E., and Pruitt, F. W.: *Am. J. M. Sc.*, 226:172, 1953.

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Surgery at the 105th Annual Meeting of the American Medical Association, Chicago, June, 1956, and published in *AMA Archives of Surgery*, January, 1957.

George L. Waldbott, M.D., Detroit, is the author of an article entitled "Incipient Fluorine Intoxication from Drinking Water," published in *Acta Medica Scandinavica*, Vol. CLVI, fasc. III, 1956.

* * *

Elmer Hess, M.D., Immediate Past President of the A.M.A., speaking on the role of the physician in Blue Shield, at Seattle and the Interim Session of the American Medical Association, said:

"Without Blue Cross and Blue Shield and other insurance programs our hospitals and ourselves would be hard put to render the services that these two organizations have made possible. Since we have accepted the insurance principle many patients would previously be non-paying patients have had their bills at least partly paid. . . . Today's professional freedom to be a private practitioner of medicine instead of a slave of government is due solely to Blue Shield, the physician's answer to 'Socialized Medicine.'"

* * *

General practitioners are taking an increasingly important role in the treatment of mental illness. As more and more patients are able to leave psychiatric hospitals, due in part to the use of tranquilizing drugs, much of the follow-up care and maintenance therapy falls to the family physician. In order to aid co-operation between the discharged patient and his family physician, a discharged patient booklet, entitled "A New Chapter," has been prepared which the State Mental Hospitals at their discretion will give to the home-going patient. (Available from Smith Klein and French.)

* * *

The Centennial Exposition commemorating the 100th anniversary of the Academy of Medicine of Cincinnati, February 27-March 5, in Music Hall, included an exhibit of the Ohio Valley Civil Defense Authority, illustrating a typical 200-bed emergency hospital.

The exhibit, along with the entire Centennial Exposition's 175 booth unit attractions has been obtained from the national Civil Defense authority for showing in Cincinnati.

* * *

The American Orthopsychiatric Association will hold its 34th Annual Meeting at the Hotel Sherman in Chicago on March 7, 8, 9, 1957.

* * *

Polio Vaccine.—During the 1956 vaccine manufacturers brought supply up to meet demand. The 100,000,000th cubic centimeter of Salk vaccine was released by the U. S. Public Health Service in Washington in mid-September. There are no more priorities on use of commercial vaccine. It is available for all who want it.

Performance of the Salk vaccine up to now suggests a potential effectiveness among persons who have received all three shots, properly spaced, of about 90 per cent. With only one shot, one cannot be sure that one is safe or that the immunization will last after the first; a second shot increases one's chance of being among the immunized. The third shot, given seven months



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after the second, further increases one's chances of being safe and it prolongs the term of safety, perhaps for years.

* * *

Lt. Col. Herschel E. Griffin, Chief of the Communications Branch, in reviewing the cause of non-effectiveness in the army, reports that three fourths of all deaths in the army are due to injury. Accidents, as in civil life, are the greatest cause of time loss. One half of all injuries are due to automobiles. The army has cut down the presence of communicable disease, which naturally has increased the proportion of accidents.

* * *

Career Incentive.—The Department of Defense has found its incentive for retaining medical officers in the armed forces has been somewhat effective. From July 1, 1956, to November 30, the medical Corps of the Army, Navy, and Air Forces showed a net gain in strength of 251. This compares with a gain of 73 in the previous year, and a loss the year before of 291. The Dental Corps shows a like change.

* * *

Any combat veteran awarded the Purple Heart would be deemed to be 10 per cent disabled from service-connected causes under a bill (H.R. 330) by Rep. McDonough (R., Calif.). This disability rating would be in addition to any other disability rating VA had established for the veteran. The effect would be to make every Purple Heart winner a service-connected case for purposes of medical care; the "availability of

space" restriction and "cannot afford to pay" oath would not apply to him, and he would be entitled to home-town as well as hospital care. Rep. Henderson (R., Ohio) proposes a three-year "presumptive" period of service-connection for arthritis, psychoses and multiple sclerosis, as well as tuberculosis. The presumptive period for arthritis is now one year, for psychosis and multiple sclerosis, two years. The bill is H.R. 1143.—*AMA Washington Letter*.

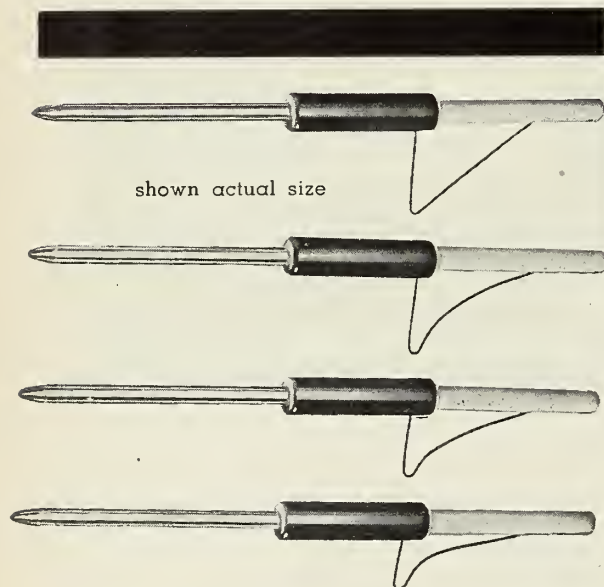
* * *

Rise of Medical Care Costs.—The January issue of *Economic Indicators*, a statistical report published monthly by Joint Congressional Economic Committee, contains a table on consumer prices which puts medical care in a unique light. For it discloses that the cost index for this category (including hospitalization and drugs, as well as medical services) has gone upward without interruption since 1939—a distinction that cannot be claimed by housing, food, recreation, transportation or any other consumer item. Still the increase in medical care costs between 1939 and November, 1956, is not as great per centagewise as the price rise for food, apparel, transportation or personal care, in the same span of years.—*WRMS*, 1-21-57.

* * *

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* * *

The American Academy of Plastic Surgery for Head and Neck announces a Convention in Otolaryngologic Plastic Surgery conducted by Samuel Fomon, M.D., New York City, N. Y., to be held May 12, 1957 through May 18, 1957. Further information may be obtained by writing to Secretary, American Academy of Plastic Surgery, Manhattan General Hospital, 307 Second Avenue, New York 3, N. Y.

* * *

Fifty-nine unclassified life science research contracts in the fields of medicine, biology, biophysics and radiation instrumentation have been announced by the Atomic Energy Commission, as part of its continuing policy of assisting and fostering research and development in fields related to atomic energy. One of these awards has been made to the University of Michigan, the investigator being A. B. French. The subject of the research is "Effect of Irradiation on the Pituitary Adrenal Axis."

* * *

Fourth International Poliomyelitis Conference.—The Governments are being invited to send delegates to the Fourth International Poliomyelitis Conference to be held in Geneva, Switzerland, on July 8-12, 1957. Thomas Francis, Jr., M.D., Ann Arbor, is serving on the Scientific Program Committee.

* * *

Clinoptikons.—The Schering Corporation has presented THE JOURNAL with two Clinoptikons—one on common rheumatic disorders and the other on arthritis. The publication of these booklets, the first in a series, marks the beginning of a new Schering service to the medical profession.

The Clinoptikons depict anatomic and pathologic aspects of major diseases frequently encountered in medical practice. The full color medical drawings will help the physician to explain to the patient the nature of his condition. This will prove valuable to the physician in giving to the patient a fuller understanding of his condition and the procedures used to help him.

* * *

Polio Research.—The University of Michigan School of Public Health has received a grant from the National Foundation for Infantile Paralysis of \$153,770, to attempt to find a chemical compound which can block the paralytic effects of polio. The research team working on this project is headed by Thomas Francis, Jr., M.D. His associates will include Drs. Gordon C. Brown, Wilber W. Ackerman, Kenneth W. Cochran, Jr., Donald E. Craig, R. Bernal Johnson and Richard E. Hartman.

This group has been studying the polio inhibiting effects of many chemical compounds with some promising experimental results.

Symposiums on three officially selected subjects will be a leading feature of the program of the Fourth Interim Congress of the Pan American Association of Ophthalmology, which is to be held in New York City, April 7-10, in joint session with the National Society for the Prevention of Blindness. Official subjects of discussion are (1) Diseases of the ocular fundus, (2) Ophthalmic surgery, and (3) Therapeutics in Present-day Ophthalmology.

* * *

Two new Ciba publications, *State of Mind* and *Pulse and Pressure*, are now being distributed to physicians, beginning the first of the year, according to T. F. Haines, president of Ciba Pharmaceutical Products, Inc. *State of Mind* is a monthly review of emotional and psychiatric problems, while *Pulse and Pressure* will report each month on current views concerning hypertension and related cardiovascular disorders. Both publications are designed for the general practitioner.

The objective of *State of Mind* is to cast some light on the various mental or emotional disorders which the general physician may be called on to treat, by providing a new medium of information and expert opinion.

Pulse and Pressure will serve the general practitioner as a medium for the opinions of leading cardiologists and other specialists in heart disease.

* * *

Alfred Whittaker, M.D., Honored.—On January 29, 1957, in its list of honorary degrees, included a Doctor of Arts degree for Alfred H. Whittaker, M.D., of Detroit. His citation is as follows:

ALFRED HEACOCK WHITTAKER

Alfred Heacock Whittaker, a native of Ohio; a graduate of the Ohio State University College of Medicine in 1918, for more than thirty years he has been engaged in the practice of General Surgery, with special interest in Industrial Medicine and Surgery.

His true physician's concern for the arts of healing has been exemplified and extended to problems of civic scope. To the Committees and Commissions on City Planning, Health, Housing, Libraries, and Urban Rehabilitation, he has given vigorous and inspiring leadership. His strong sense of human relationships has motivated his lifelong interest in our historical societies whose developing work he has supported by splendid contributions of time energy and money.

We have been privileged to share in his vision of a better community a vision which he has actively helped us in the present to shape closer to the best historic dreams and plans of the past.

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* * *


The W. K. Kellogg Foundation has made a \$401,515 commitment to the University of Pennsylvania School of Medicine for testing and improving the periodic health examination as an instrument for the early detection of disease and the promotion of health.—*Philadelphia Medicine*, February 1, 1957.

* * *

The second volume of the recently resumed series of annual reports of The Surgeon General, titled "Medical Statistics of the United States Army, 1954," has been recently published and is now being distributed.

MARCH, 1957

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* * *

American Board of Obstetrics and Gynecology.—The next scheduled Examinations (Part II) oral and clinical for all candidates will be conducted at the Edgewater Beach Hotel, Chicago, Illinois, by the entire Board from May 16 through 25, 1957. Formal notice of the exact time of each candidate's examination will be sent him in advance of the examination dates.

Candidates who participated in the Part I examinations will be notified of their eligibility for the Part II examinations as soon as possible.

* * *

The Ninth Annual Convention of the International Academy of Proctology will meet at the Plaza, New York, April 29, 30, and May 1, 2, 1957. Cocktail and dinner will be served the delegates and trustees and their wives, Sunday evening, April 28. All physicians are invited to attend the various functions including the banquet, Thursday evening, May 2. Members and non-members are welcome to the convention. There are no fees for attendance.

* * *

Pharmaceutical Progress.—If a 1947 graduate of The University of Michigan College of Pharmacy were to enroll for his training all over again in 1957, he would not find any courses in pharmacy the same as those he took ten years ago, either in name or content.

According to Dean Tom D. Rowe of the College of Pharmacy, the reason for this startling change is the tremendous advance in the field of drugs. "More than 50 per cent of the drugs used today were not known ten years ago," he explains. "The job of keeping up with developments of new drugs and other new products, having to know and be familiar with them, gives the pharmacist one of the greatest 'continuing education' responsibilities of any professional man."

* * *

Interim Congress.—A special invitation is extended to Michigan physicians to attend the Fourth Interim Congress of the Pan American Association of Ophthalmology, which will be a joint session with the National Society for the Prevention of Blindness in New York City, April 7-10, 1957. Headquarters will be at the Hotel Statler.

* * *

Peter B. Rastello, M.D., has been appointed medical director of the Fisher Body Division of General Motors to succeed A. F. Lecklider, M.D., who retired in January after thirty-four years with Fisher Body. Dr. Rastello was born in Hancock, Michigan, and is a graduate of the University of Michigan Medical School.

R. L. Novy, M.D., Detroit, was honored January 22 or sixteen years of outstanding service to Detroit, contributed as a member of the Detroit Board of Health. The tribute was made to Dr. Novy at a luncheon given by the Woman's Advertising Club in the Ford Auditorium.

Congratulations, Dr. Novy, on a magnificent job in behalf of the City of Detroit and the health of its people!

* * *

The Summer Camp for Diabetic Children will be opened for the eighth season under the auspices of the Chicago Diabetes Association, Inc., from July 14 to August 4, 1957, at Holiday Home, Lake Geneva, Wisconsin.

In addition to the complete camp personnel, the Chicago Diabetes Association furnishes a staff of resident physicians and dietitians, trained in the care of diabetic children.

Boys and girls, aged eight through fourteen years, are eligible. For further information regarding fees, interested persons should be directed to write or telephone the office of the Chicago Diabetes Association. Fees will be set on a sliding scale to meet individual circumstances.

Physicians are urged to notify parents of diabetic children and to enter the names of children who would like to attend camp. Applications may be obtained from and inquiries should be addressed to: James B. Hurd, M.D., Chairman, c/o The Chicago Diabetes Association, 5 South Wabash Avenue, Chicago 3, Illinois. ANdover 3-1861.

* * *

The Third Annual Nutrition Conference, sponsored by Wayne State University College of Medicine, will be held on Thursday and Friday, April 4 and 5, 1957. Speakers on the general subjects, "Fats—Helpful or Harmful," will include Drs. John B. Brown, Ohio State University; Frederick J. Stare, Harvard University; Grace A. Goldsmith, Tulane University; and Ancel Keys, University of Minnesota. Further information may be obtained by writing the Department of Physiological Chemistry, Wayne State University College of Medicine, Detroit 7, Michigan. All members of the Michigan State Medical Society are cordially invited to attend this conference.

* * *

It would appear that there are well authenticated instances where malnutrition was the only probable cause of a rise in tuberculosis morbidity and mortality, though in most instances it is one of several associated possible causes. There are also indications that malnutrition becomes operative as an etiological factor in tuberculosis only when a critical level is reached. On the other hand, it is recognized that optimum nutrition gives no absolute protection against tuberculosis, if other circumstances are unfavorable.—Alton S. Pope, M.D., and John E. Gordon, M.D., American Journal of Medical Sciences, September, 1955.

* * *

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*Martin, G.M., and Herrick, J. F.: Further Evaluation of Heating by Microwave and by Infra-red as Used Clinically, J.A.M.A. 159:1286 (Nov. 26) 1955.

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Treatment," a new medical film, is now available from the Medical Film Center of Smith, Kline & French Laboratories. Particularly oriented towards the physician in general practice, it also is suitable for medical teaching.

A 16 mm. sound motion picture in full color, the 25 minute film reviews the processes of metabolism and describes the etiology and diagnosis of hypometabolism whether due to subnormal activity of the thyroid gland itself (hypothyroidism) or faulty cellular utilization of the thyroid hormone (metabolic insufficiency). The clinical use of "Cytomel," a new Smith, Kline & French Laboratories preparation designed for use in the treatment of hypometabolic states, is demonstrated in the film.

Prints of this film, as well as other medical motion pictures, are available on free loan to physicians and medical groups through SKF professional Service Representatives, or by writing: Medical Film Center, Smith Kline & French Laboratories, Philadelphia 1, Pa. Four weeks' notice and an alternate showing date should be given whenever possible.

* * *

"The Pennsylvania State Medical Society's 201-member House of Delegates has unanimously voted to void and terminate its nine-month-old UMW Welfare and Retirement Fund agreement. Last May, the AMA pointed out that the agreement might help improve union physician relations.

"Earlier, members of the medical staff at Citizen General Hospital, New Kensington, Pa., charged that the hospital had been boycotted by the union for refusing to accept UMW-sponsored physicians. This, said state society delegates, constituted a "plot" to "pack" the medical staff and seize control of the hospital.

"The delegates further contended that since October 1, the UMW has refused to pay bills incurred by beneficiaries for non-emergency care and treatment at the New Kensington hospital. Dr. Warren F. Draper, outspoken medical director of the \$52 million fund, declared that his organization feels "no obligation" to purchase medical services from any hospital.

"The evidence indicates that unless the UMW can control hospital staff appointments, it doesn't want to play."—AAGP Secretary's Letter, January, 1957, GP

* * *

The Cook County Graduate School of Medicine announces an intensive course in Neuromuscular Disease: of Children with special emphasis on cerebral palsy, to be given by Meyer A. Perlstein, M.D., for the two-week period from July 8 to 19, 1957. This is an intensive didactic and clinical course designed for pediatricians, orthopedists, neurologists, psychiatrists and physiatrists interested in the care and treatment of children with neuromuscular handicaps. Emphasis will be placed on the practical clinical aspects of treatment and rehabilitation procedures.

The course will include itinerant clinics to round out the program in most of its practical aspects. The fee for the course, which is \$250, will include the cost of luncheons during the two-week period, as well as the

expense of travel, meals and accommodations during the trip to the field clinic. For further information, write to John W. Neal, Registrar, Cook County Graduate School of Medicine, 707 South Wood Street, Chicago, Illinois.

* * *

"Federal Income Tax Liability of Physicians" is a thirty-eight page booklet available from the AMA Law Department. It contains many matters of interest to physicians in preparing their 1957 income tax returns: business entertainment expenses, deductions for expenses incurred in taking postgraduate courses, and deductions for maintaining an office at home. For a copy of this booklet write Law Department, AMA, 535 N. Dearborn Street, Chicago 10.

* * *

Hungarian Physicians.—M. Arthur Cline, M.D., Executive Secretary of the American Medical Society in Vienna, writes that over 600 native Hungarian refugee doctors of medicine have been receiving the aid of the AMA of Vienna. Dr. Cline writes: "There are presently over 450 Hungarian doctors in Austria who wish to return to their practice as soon as a change in the Hungarian political situation permits. In fact, we are urging these colleagues to remain here (in Vienna) attending this possibility, for we feel that most of them, should they ever enter the United States, would encounter considerable difficulty with language and state board requirements. However, to maintain them here will require our further financial support for several months to come." Funds to aid these Hungarian doctors may be sent direct to Dr. Cline in care of 11 Universitätsstrasse, Vienna 1, Austria.

* * *

The first annual meeting of the American Association of Medical Assistants was held in Milwaukee October 26-28, 1956. Miss Hallie Cummins, Caro, Michigan, was elected as a member of the new Board of Directors; subsequently, the directors selected Miss Cummins as Chairman of the Executive Committee.

MSMS was represented by R. W. Shook, M.D., Kalamazoo, a member of the MSMS Council. J. E. Manning, M.D., Saginaw, was speaker at the banquet on "The Doctor's Dream Girl."

* * *

The Michigan Cancer Coordinating Committee's officers for the year 1957 are: Chairman, Harry M. Nelson, M.D., Detroit; vice chairman, James W. Hubly, M.D., Battle Creek; and secretary, William J. Burns, LL.B., Lansing. A vote of thanks was placed on the record to C. Allen Payne, M.D., Grand Rapids, for his efficient chairmanship of the MCCC during the past four years.

* * *

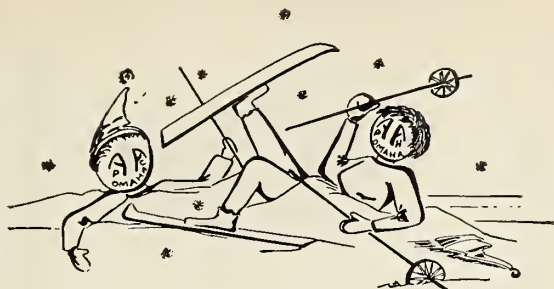
Alfred H. Whittaker, M.D., Detroit, received the honorary degree of Doctor of Arts from Wayne State University at its commencement exercises, January 29. Congratulations, Dr. Whittaker.

* * *

Wayne State University College of Medicine Alumni Clinic Day and Alumni Reunion will be held May 1, 1957, at the Fort Shelby Hotel, Detroit. Presentations will include "Returning the Cardiac to Work" by Herman K. Hellerstein, M.D., Cleveland; "Clinical Evi-

MARCH, 1957

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dences of Placental Deficiency" by Clyde L. Randall, M.D., Buffalo; "Diagnosis and Treatment of Surgical Lesions of the Stomach" by Campbell M. Gardner, M.D., Montreal; "Application of Psychiatry in General Practice" by R. W. Waggoner, M.D., Ann Arbor; "Emergency Surgery in the New Born" by William L. Riker, M.D., Chicago; and "Low-Grade Infections of the Urinary Tract" by Maurice A. Schnitken, M.D., Toledo. The scientific meeting will be followed by a reception and the annual banquet (Crystal Ballroom and Coral Room).

* * *

The American Medical Education Foundation completed its fifth year of operation with a record total of \$1,072,717 in contributions—a 41 per cent increase over last year's total. Grants are being made to the nation's eighty-three medical schools.

* * *

\$75,000 in Educational Policies.—In a contest which closes May 4, 1957, Johnson & Johnson, in co-operation with the Mutual Benefit Life Insurance Company, will offer educational policies totaling \$75,000 through the Annual Youth Scholarship Fund. The contest will award scholarship prizes for the best fifty-word essays that complete the statement: "A Good Education is important because . . ." Top prize will be \$10,000, with two prizes of \$5,000, six fourth prizes of \$1,500 each and thirty-six prizes of \$1,000 each.

* * *

World Health Day is April 7—selected by the World Health Organization, according to Leroy E. Burney, M.D., Surgeon General of the Public Health Service.



L. G. Christian, M.D., of Lansing was given the first honorary lifetime appointment to a State commission—the first in the history of Michigan—when Governor G. Mennen Williams gave him this signal honor on January 24 in recognition of his long service to the Michigan Social Welfare Commission. Dr. Christian served this Commission from the time it was first established in 1939 until October 15, 1956. The Governor, in making the honorary appointment, stated Dr. Christian exemplified "diligence, integrity, compassion and a love for all mankind, and that his public service brought not only great credit upon himself but great benefit to the people of Michigan."

* * *

The Upper Peninsula Medical Society's Sixty-Fourth Annual Meeting will be held June 21-22 in Houghton, Michigan, under the chairmanship of T. P. Wickliffe, M.D., Calumet, and Forrest W. Larson, M.D., Houghton, who will serve as secretary. Four excellent facilities will be used by the UPMS for its functions: the Douglass House, the Scott Hotel, the Onigaming Yacht Club and the Memorial Union Building of Michigan Tech.

* * *

The Bahamas branch of the British Medical Association invites all MSMS members to attend its Bahamas Medical Conference in Nassau April 23-27, 1957, at the British Colonial Hotel and the Princess Margaret Hospital in Nassau. For information and program write to B. L. Frank, M.D., P.O. Box 148, British Colonial Hotel, Nassau.

* * *

The National Industrial Health Conference will be held at St. Louis April 20-26. For information write the Secretary of the Conference, 604 N. Michigan Avenue, Chicago 11, Illinois.

* * *

The University of Cincinnati's Institute of Industrial Health offers graduate fellowships in Industrial Medicine, providing professional training for graduates of approved medical schools who have completed one year of internship. This three-year course of instruction includes stipends for the first two years of between \$3,000 and \$4,000, depending upon marital status. For information write Cincinnati College of Medicine, Eden and Bethesda Avenues, Cincinnati 19, Ohio.

* * *

"Pediatric Advances for Pediatricians and General Practitioners" is the title of a short refresher course conducted by the staff of Children's Hospital, Philadelphia, May 27-31. Tuition \$110.00. "Practical Pediatric Hematology" course will be held June 3-5—tuition \$75.00; and "Blood Group Incompatibilities and Erythroblastosis Fetalis" on June 6-7—tuition \$50.00. Inquiries should be addressed to Irving J. Wolman, M.D., 1740 Bainbridge Street, Philadelphia 46, Pennsylvania.

"Medicine—A Life Long Study" will be the theme of the Second World Conference on Medical Education to be held in Chicago August 30-September 4, 1959, under the sponsorship of the World Medical Association.

* * *

Labor Says:

Health Plans are a labor goal. At the last meeting of the American Public Health Association, James Brindle, director of the United Auto Workers' Social Security Department, noted that although labor unions differ on details of how medical care ought to be provided and financed, most of them have supported legislation to establish a national health insurance program.

Since Congress has not enacted this legislation all unions, because of their health and welfare funds gained through collective bargaining, have the task of making the best use of the dollars set aside for medical care. Labor has used these dollars to purchase mostly hospitalization coverage and surgical benefits from Blue Cross, Blue Shield and commercial carriers. Some plans include home and office care but these are rare. In about fifty instances labor groups have established direct service medical centers where services are actually provided rather than cash indemnities to cover part of the costs.

The latter type of plan has proven more popular with members because there are no barriers to the service, preventive services are usually included in the benefits and there are no hidden bills cropping up after the services are rendered.

Health insurance in the last 20 years has had a phenomenal growth, mostly as a result of collective bargaining. Unfortunately, even at this date, the extent to which commonly available insurance programs meet a family's health needs is not too impressive to labor. Among the cause for difficulties is the system of indemnity payments for physicians' services which is not a satisfactory method of paying for services and are a base upon which some physicians too frequently add substantial charges. Also the emphasis on hospitalization and surgical coverage as in the case of most plans without substantial outpatient benefits is frequently a cause for unnecessary hospitalization. Also as a result of inadequate concern for operating efficiency in hospitals and an unwillingness to enforce legitimate controls there are unjustified premium increases.

Labor is beginning to focus more on the following objectives:

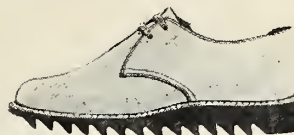
1. Complete prepayment for medical care without co-insurance and deductible features and hidden added costs.
2. Comprehensive benefits—only if the range of health services is complete will the individual's health needs be effectively and economically met.
3. Rational organization of medical services—on the basis of group practice, and
4. Control of the quality of medical services which must be built into medical care plans. (Dr. Morris Brand in *AFL-CIO News*, December 22, 1956.)

MARCH, 1957

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Incompletely treated tuberculosis patients who leave sanatoriums and interrupt their drug therapy threaten the effectiveness of modern drug treatment for tuberculosis. These uncooperative patients may spread the disease in a form resistant to drug treatment.

At Maybury Sanatorium in Northville between 140 and 150 children are admitted annually. Dr. W. Leonard Howard, medical superintendent of the sanatorium, reported 31 per cent of the children admitted in 1955 were resistant to the modern drugs. Lowered death rates cannot be maintained if large numbers of patients enter sanatoriums with their tuberculosis resistant to life-saving drugs.

* * *

British Medics Fight for More Pay.—Average \$4,875; Want \$616 More from State: Britain's physicians were reported to have accumulated a fund to fight their demand for more money from socialized medicine. They

held meetings over the week end to decide whether to stage a walkout on the health service.

Britain has nearly 40,000 doctors. All except 700 take part in the national health program. Some of the government physicians also take private patients but the number of Britons paying their own doctor bills is less than a million.

The government admits that doctors, under socialized medicine, today do not have the living standards of doctors under private medicine in 1939. But the government puts this down to demotion of doctors, as one report puts it, from the class of squire to that of civil servant. (Chicago Daily Tribune, 12-31-56)—*Insurance Economics Surveys*, January, 1957.

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Jan. 13	WJBK-TV, Detroit	Tenth Annual Michigan Rural Health Conference	J. K. Altland, M.D., Lansing S. E. Chapin, M.D., Dearborn E. H. Wiard, Lansing
Jan. 17	WKAR-TV, East Lansing	Tenth Annual Michigan Rural Health Conference	Edward Kiley, East Lansing Dr. Frank W. Suggitt, Lansing Bob Starring, East Lansing Dr. Louis Wolfanger, East Lansing Fred Kellow, Lansing Carol Avery, Okemos Jim Kreider, Okemos Mary Madzia, Okemos Ted Warner, Okemos
Jan. 20	WJBK-TV, Detroit	Mental Health	Film—"Roots of Happiness"
Jan. 27	WJBK-TV, Detroit	Fire Safety	Film—"Farm Petroleum Safety"
Jan. 31	WKAR-TV, East Lansing	The Doctor Examines Your Heart	E. A. Irvin, M.D., Detroit John G. Bielawski, M.D., Detroit Ernest T. Guy, Detroit E. H. Wiard, Lansing

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THE DOCTOR'S LIBRARY

Acknowledgment of all books received will be made in this column, and this will be deemed by us as full compensation to those sending them. A selection will be made for review, as expedient.

A MAN AGAINST INSANITY. By Paul de Kruif, Ph.D. 240 pages. New York: Harcourt, Brace & Co., 1957. Price: \$3.95.

Has Michigan a modern Beaumont in its boundaries? Paul de Kruif answers that question with a sturdy "Yes" in his latest and most thrilling and emphatic book.

Beaumont's resounding research of the 1820's opened windows of knowledge about physiology of digestion; the modern pioneer, who becomes the modest hero of de Kruif's 1957 opus, whips chronic mental illness and gives promise not alone to abolishing mental institutions (and changing them into community treatment centers for abnormal behavior) but to guiding the more important road of *prevention*.

John T. Ferguson, M.D., of Traverse City State Hospital, is the central figure in "A Man Against Insanity." A zealous lone wolf, like William Beaumont, M.D., Dr. Ferguson has developed the plain science that insanity is too often just chemical imbalance that can be brought on an even keel by the use of certain modern behavior medicines (chemicals).

The greatest pull in the book is the sanguine hope for mental disease *prevention* through the work of the family physician:

"The family doctor is the father of psychiatry. It is this man who sees mental illness start. He practices soft shoe psychiatry with over half of his patients every day. And the public wants its competent modern general practitioners to handle its family mental and emotional problems."

Hope for the cure and eventual *prevention* of insanity pervades this well authenticated document. Scientific facts abound—but never at the expense of reader interest. de Kruif's words rush with vigor and intensity and always with good humor and homey Americanisms—characteristics that make his labors "best sellers."

"A Man Against Insanity" has twelve chapters and 240 pages that can be enjoyed by physician and layman alike. The bright vision enfolded in the final thirty pages is "must" reading for all general practitioners.

W.J.B.

RECOMMENDATIONS FOR DRIVER LICENSING AND RE-EXAMINATION. PROPOSED AT SYMPOSIUM ON MEDICAL ASPECTS OF MOTOR VEHICLE ACCIDENT PREVENTION Center for Safety Education, New York University, Washington Square, New York. Reprints at \$.50 per copy, in quantities of ten or more, \$.40 each.

New driver licensing requirements have been proposed by 125 leading medical specialists from the United States and Canada and traffic safety authorities in government and industry, who met at New York University, May 23, 1956, for an all-day workshop conference on Medical Aspects of Motor Vehicle Accident Prevention.

MARCH, 1957



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These recommendations, together with an analysis of research needs, are contained in the thirty-two-page report of the proceedings, contained in full in the December 15 issue of the *New York State Journal of Medicine*.

Co-sponsored by the University's Center for Safety, Education and the NYU-Bellevue Medical Center, this pioneer conference was held in co-operation with the New York Academy of Medicine's Committee on Public Health, the New York Industrial Medical Society, and several county medical societies.

SICK CHILDREN. Diagnosis and Treatment. By Donald Paterson, M.D. (Edin.), F.R.C.P. (Lond.), F.R.C.P. (Canada), Consulting Physician to the Hospital for Sick Children, Great Ormond Street, London; Consulting Paediatrician, Westminster Hospital, London; Honorary Consultant to the Department of Paediatrics at the Vancouver General Hospital; Sometime Clinical Professor of Paediatrics, Faculty of Medicine, University of British Columbia and Senior in Paediatrics, Vancouver General Hospital. Revised by Reginald Lightwood, M.D. (Lond.), F.R.C.P. (Lond.) D.P.H. (Eng.), Director, Paediatric Unit, St. Mary's Hospital Medical School, University of London, and Physician-in-Charge, Children's Department, St. Mary's Hospital, London; Physician to The Hospital for Sick Children, Great Ormond Street, London; Paediatrician to the Research Unit for Juvenile Rheumatism, Canadian Red Cross Memorial Hospital, Taplow; External Examiner in Paediatrics to the University of Wales. With the assistance of F. S. W. Brimblecombe, M.D. (Lond.), M.R.C.P. (Lond.), D.C.H., Paediatrician, Royal Devon and Exeter Hospital, and Exeter City Hospital; Consultant Paediatrician, Exeter Clinical Area. Philadelphia, Montreal: J. B. Lippincott Company. Price \$8.75.

This is a very good book considering it has been written to cover the commoner children's diseases without being too detailed. It is concise, but yet covers enough to give a most adequate picture of any subject being quite complete regarding diagnosis and treatment. Reading the subject matter is very easy and interesting because of the manner in which the British authors present it. Due to this being a British text there are some variations and differences occasionally noted in either type of therapy or agents used. The publisher has unfortunately bound the book with the index pages not in order or sequence.

J.L.

ALLERGIC DERMATOSES DUE TO PHYSICAL AGENTS. Edited by Rudolf L. Baer, M.D., Associate Professor of Clinical Dermatology and Syphilology, New York University Postgraduate Medical School. 101 pages. New York University Press. Philadelphia and Montreal: J. B. Lippincott Company (distributors). Price: \$3.00.

This is a small book of 101 pages which is an outline of the present knowledge of this somewhat limited field

of Dermatology. The six contributors, who are well qualified in this field, have done a good job of presenting a subject which is still theoretical to a great extent. For those interested in these peculiar phenomena which occur on the skin, this book is a good summary and guide.

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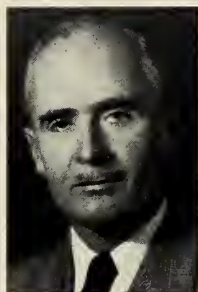
APRIL, 1957

NUMBER 4

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Tenth Annual Michigan Rural Health Conference

The following report was submitted to the Midland County Medical Society by G. Fred Moench, M.D., official delegate of the Society to the three-day meeting. The Editor feels this is an outstanding example of reporting by a county society delegate and might well serve as a guide for other delegates when they wish to inform their members of meetings they attend.

The Conference theme centered around serious health problems developed as people move out of cities into newly settled sections called "fringe areas."

The purpose of this conference was to seek solutions to the health problems which develop in these new areas.

General Conference chairman, Brooker L. Masters, M.D., Fremont, chairman MSMS Committee on Rural Medical Service, presented "Theme for the Day."

More than 100 representatives from dozens of Health Councils and 104 important health groups co-sponsoring the conference attended the three-day session.

The first day, called "Professional Day," was devoted almost entirely to meetings of doctors, nurses and health officials. Emphasis was placed on these problems:

1. How to get political bodies to appropriate enough money for suitable adequate health departments.
2. How to meet the problem from mental hospitals, develop preventive aspects and how to find facilities and personnel to treat mental cases in hospitals and as out-patients with services that follow the patient back to his home community.
3. How to care for the chronically ill old person.
4. How to develop more emphasis on prevention of disease rather than cure after the disease has struck. This includes mental health as well as physical health.
5. How to force more planning on sewage needs and refuse disposal before they become dire problems difficult to solve.

The workshop series, medical, dental, public health, nursing and hospital administration brought the professionals and people together on problems unique to rural areas. Rural medicine is an entirely new field that is appearing in today's health picture.

Four professional papers on medical health topics were presented and will appear in Michigan State Medical Society JOURNAL in the near future. The titles were "Diseases Transmitted from

Animals to Man," "The Management of the Injured Extremity," "Dentistry in Rural Michigan," and "The Management of Acute Chest Injuries."

The second day was called "Rural Health Day" and was devoted to a "Composium" on fringe areas health problems. "Composium" is a word coined for this conference which means a controlled "rhubarb." Each expert leader had a table where guests gathered to present their questions.

Subjects covered included Sanitation, Water Supply and Zoning, Fluoridation and getting a dentist to locate, Hospitals and prepayment plans, and School Health and Recreation.

After a coffee break and visit to the exhibits in Big 10 room, morning session No. 2 was staged. The four tables highlighted questions on the following subjects: Resort problems and the Tourist Industry; Accidents and Traffic Control; Migratory Labor; Getting an M.D. to Locate.

At the noon luncheon a group of high school students and their physical education teacher presented, in spirited fashion, the viewpoint of various youth organizations on health problems confronting our young people in 1957.

Problems and comments presented were: (1) Recreation and nutrition for healthy bodies. Need for controlled use of cars and TV. (2) Problem of how to have a clear complexion. (3) Problem of youth in meeting the social alcoholic beverage drinking, drug, and smoking practices. (4) Need for education and guidance in personal health and sex education. Opinion was that sex education lacked organization and should be done by qualified people. (5) There was general agreement of youth representatives that parents should be a little more strict in parental discipline regarding health, recreation and safety, especially with diet, sleep and car driving.

The afternoon session general assembly entitled, "Harvesting the Crop of Questions," featured full audience participation.

The Annual R.H.C. banquet, with Hugh Breneman representing the MSMS serving as toastmaster, highlighted the presentation of service recognition certificates to certain individuals and groups. The Chesaning Community Service Group, Saginaw County, were awarded a plaque for their activities in health work in the field of TB and Cancer case finding surveys, organization of Visiting Nurse Association and school health programs.

A component of the Michigan State University Glee Club presented an entertaining program.

(Continued on Page 410)

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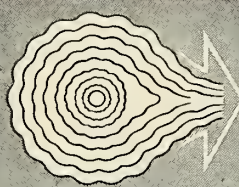
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MICHIGAN RURAL HEALTH CONFERENCE

(Continued from Page 408)

This group departed for Washington after the banquet to sing at the ceremonies for the Presidential Inauguration.

The third and last day was Community Health Day and highlighted four workshops designed to study and plan community lead programs, each staffed with community local-state level resource people.

The title of this session was "RX—Prescription for Community Health."

Group I—"Diagnosis of Symptoms,"—the recognizing of need by exploration of ways to "take the pulse of the community, diagnose its health problems, discuss the value and use of community surveys and studies, and consider how to best tackle community health problems."

Group II—"The Prescription"—studying the community resources.

Group III—"Filling the Prescription"—or organizing for action which means developing a program by utilizing all resources.

Group IV—"The Prognosis"—or what are the prospects?

A complete report of this conference will be available at a later date as a release of the Michigan Health Council and its co-sponsoring agencies.

A brief summary and suggestions for local consideration from your representative delegate follow:

1. This conference was a well organized and executed action which presented a means for communication between professional leaders, agencies and the public as consumers of health services.

It provided factual health education.

It is a live medical society, public relations activity by providing an opportunity for physicians to learn directly the problems of people and for people to learn the problems of the physician in rendition of medical services.

2. Community Health is a leadership responsibility of medical, dental, public health and other health agencies working with citizen consumer groups.

3. Good medical, dental and public health community service to consumers is one of the best public relations a local county medical society can develop.

4. Continued study and evaluation of community needs is a *must* and recognition of "fringe area" and new rural health problems must be met with.

5. Medical, dental and public health can serve as leaders in the community approach. The program must be designed and implemented at local level by local people, for local people.

6. The procedure for developing the program is:

(a) Determine the presence and extent of the community need.

(b) Survey and identify community resources available to meet the need.

(c) Go into an action program toward utilization of all resources and to find new and additional resources not available in the community.

(d) Evaluation and continuous study of community programs in relation to old and new community health needs.

7. As delegate to the Michigan Rural Health Conference, it is recommended that the Public Relations Committee of the Midland County Medical Society explore and study the possibility of sponsoring a Midland County Health Conference patterned after the program of the Michigan Rural Health Conference, sponsored by the Michigan Health Council. The reasons for this recommendation are:

(a) Midland County is growing, progressive and is developing many new needs.

(b) It has qualified medical, dental and public health leaders with many other health, education and welfare agency leaders as resource personnel.

(c) Modern day problems are no longer solved by any one agency. A united team approach in a positive action program is necessary to meet the threats implied in the criticism of Blue Cross and Blue Shield, and the attempts to organize programs of medical and hospital service care without the advice and counsel of organized medical, hospital and public health agencies.

(d) With its many resources, Midland County is in an excellent position to accept the challenge of modern health problems with modern research methods to maintain high standards of service and care for all the people in the community by methods in tune with the principles of private competitive system in a democracy.

(e) While we have been actively engaged in fighting Federal government controlled plans, there is danger in overlooking the threats implied from attempts to organize group practice subsidized by neither the medical profession or the Federal government. Patterns for meeting these growing threats must be developed on the local level.

MSMS ANNUAL MEETING

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1. Herrell, W. E., Erythromycin, Antibiotics Monographs, No. 1, p. 34, New York, Medical Encyclopedia Inc., 1955. 2. Eastman, G., Cook, E. and Bunn, P., N. Y. State J. Med., 56:241, 1956. 3. Solomon, S. and Johnston, B., Amer. J. Med. Sc., 230:660, 1955.

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Attendance Records Broken at 1957 Seminar

"What's your future as a professional man?", "Today's trends in medicine," and "Your organizational opportunities" were the three main topics of discussion at the 1957 Annual County Secretaries-Public Relations Seminar held January 25-26-27 in Detroit.



L. Howard Schriver, M.D., of Cincinnati, past president of the Blue Shield Commission, addressing guests at the concluding luncheon Sunday on "The Job is Yours."

Meeting Co-chairmen C. D. Selby, M.D., Port Huron and R. W. Teed, M.D., Ann Arbor, said in a post-meeting announcement that previous registration marks had been shattered.

The Seminar, running from Friday evening to Sunday noon, played host to nearly 150 guests representing nearly every component county medical society in Michigan.

The Friday banquet speaker was L. Fernald Foster, M.D., MSMS secretary, who spoke on "Your Future as a Professional Man." Doctor Foster outlined the problems faced by medicine in protecting the heritage of freedom in medical practice.

Doctor Foster's remarks set the stage for the following day's session which diagnosed Today's Trends and sought solutions for the problems raised.

Discussing the trends of today from the standpoint of prepaid medical care plans was Jay C. Ketchum, Detroit, Executive Vice President of Michigan Medical Service. Representing Labor on the panel was John Reid, East Lansing, Commissioner, Michigan Department of Labor. Medical care plans through the eyes of management was discussed by James M. Gillen, Detroit, Director of Personnel Research, General Motors Corporation. The government's interest was described by Donald H. Stubbs, M.D., president of Medical Service of Washington, D. C.

During the afternoon session, the same four panelists served as "experts-at-bay." Impromptu questions were thrown at the experts by guests in the audience as well as the on-stage devil's advocates: James R. Doty, M.D., Luther R. Leader, M.D., Walter A. Meier, M.D., George N. Petroff, M.D., and John M. Wood, M.D.

Summarist for this session was John R. Rodger, M.D.



Mr. Jay Ketchum and Donald H. Stubbs, M.D., two of the Saturday morning panelists who outlined their appraisal of "Today's Trends."

Sunday morning speakers on "Our Organizational Opportunities" included Wm. M. LeFevre, M.D., Indoctination; W. S. Jones, M.D., and William J. Burns, LL.B., The Organization's Administration; C. Allen Payne, M.D., and Hugh W. Brennehan, Public Relations; R. J. Hubbell, M.D., Mediation and Grievance, and Horace Wray Porter, M.D., Ethics.

The concluding luncheon on Sunday was sparked by guest speaker L. Howard Schriver, M.D., of Cincinnati, past president of Blue Shield Commission, who told the audience that "The Job Is Yours."

Elected Chairman of the 1958 Seminar to be held next January was John M. Wood, M.D.,

(Continued on Page 416)

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(Continued from Page 414)

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(Continued on Page 420)

RECORD OF ATTENDANCE AT MSMS COUNTY SECRETARIES-PUBLIC RELATIONS SEMINAR
January 25-26-27, 1957

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Alpena-Alcona-Presque Isle	O	O	X	X	N	O	O	N	
Barry	O	O	X	X	N	O	X	N	
Bay-Arenac-Iosco	X	O	X	O	O	X	XO	N	X
Berrien	O	O	O	X	O	O	O	N	
Branch	O	O	X	O	N	O	O	N	X
Calhoun	O	O	O	O	O	X	O	N	
Cass	O	O	O	N	N	O	O	N	
Chippewa-Mackinac	O	O	X	O	N	O	XO	N	
Clinton	O	O	O	O	N	O	O	N	
Delta-Schoolcraft	O	O	X	O	N	O	N	N	
Dickinson-Iron	O	O	X	O	N	O	N	N	
Eaton	O	O	X	O	N	O	N	N	
Genesee	O	X	X	X	X	O	XXO	X	
Gogebic	X	O	O	N	N	O	N	N	
Grand Traverse-Leelanau-Benzie...	O	O	O	O	N	O	X	N	
Gratiot-Isabella-Clare	X	O	X	X	N	O	O	N	
Hillsdale	O	O	O	O	O	O	N	N	
Houghton-Baraga-Keweenaw	X	O	O	O	O	O	O	N	
Huron	O	O	O	X	N	O	O	O	
Ingham	O	O	O	X	N	X	OOO	N	
Ionia-Montcalm	X	O	O	O	N	O	N	N	
Jackson	X	O	X	X	N	O	N	N	
Kalamazoo	X	O	X	X	X	X	X	N	
Kent	X	X	X	X	O	X	OOO	X	
Lapeer	X	O	X	X	N	X	N	N	
Lenawee	X	O	X	O	N	N	N	N	
Livingston	O	O	X	O	N	O	N	N	
Luce	O	O	O	N	N	O	N	N	
Macomb	X	X	X	O	N	X	O	N	
Manistee	O	O	X	O	N	O	N	N	
Marquette-Alger	O	O	X	O	N	O	O	N	
Mason	O	O	O	O	N	O	N	N	
Mecosta-Osceola-Lake	O	O	O	X	N	O	N	N	
Menominee	O	O	X	X	N	O	N	N	
Midland	O	O	O	X	N	O	O	N	
Monroe	X	O	X	O	N	O	O	N	
Muskegon	X	O	X	X	O	O	O	X	
Newaygo	X	O	X	O	N	O	N	N	
North Central	O	O	O	O	N	O	O	N	
Northern Michigan	O	O	X	N	N	O	X	N	
Oakland	O	X	X	X	X	O	OOO	X	
Oceana	O	O	O	O	N	O	N	N	
Ontonagon	O	O	X	N	N	O	N	N	
Ottawa	O	O	O	X	N	O	O	N	
Saginaw	X	X	X	O	O	O	N	O	X
St. Clair	X	O	X	O	N	O	X	N	
St. Joseph	O	X	X	X	N	O	O	N	
Sanilac	O	O	O	O	N	O	N	N	
Shiawassee	O	O	X	O	N	O	O	N	
Tuscola	O	X	O	N	N	O	N	N	
Van Buren	X	X	X	X	N	O	O	N	X
Washtenaw	O	X	X	O	O	X	XOO	O	
Wayne	X	O	O	O	O	XX	XXXOO	X	XXX
Wexford-Missaukee	O	O	X	O	N	X	OOOOO	N	

O—Not represented; X—Present; N—None.

Others present at the Seminar were: Woman's Auxiliary representatives, 4; Michigan State Medical Assistants Society representatives, 3; Michigan Medical Service representatives, 13; Seminar speakers, 22; guests, 18.

frozen shoulder

Bursitis and tenosynovitis are new terms to homemakers, but they are not uncommon sequels to overexertion. Early antirheumatic therapy is to be encouraged in the treatment of these conditions, as it is in more serious rheumatic conditions, to alleviate pain and prevent progression of the disorder. With adequate therapy the prognosis of bursitis in its acute stage is good. Delaying therapy may result in extension of the inflammation and gross anatomical changes that tend to incapacitate the patient.

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ATTENDANCE RECORDS BROKEN

(Continued from Page 416)

John Fopeano, M.D., Kalamazoo (Kalamazoo); D. B. Hagerman, M.D., Grand Rapids (Kent); Thomas Kay Buchanan, M.D., Imlay City (Lapeer); George C. Wilson, M.D., Clinton (Lenawee); E. G. Siegfried, M.D., Mt. Clemens (Macomb); John P. Flanders, M.D., Monroe (Monroe); E. J. Lauretti, M.D., Muskegon (Muskegon); Robert E. Paxton, M.D., Fremont (Newaygo); J. E. Manning, M.D., Saginaw (Saginaw); Charles N. Hoyt, M.D., Port Huron (St. Clair); M. W. Buckborough, M.D., South Haven (Van Buren); Luther R. Leader, M.D., Detroit (Wayne).

County Presidents-Elect.—James I. Clark, M.D., Fennville (Allegan); Clayton K. Stroup, M.D., Flint (Genesee); Howard Benjamin, M.D., Grand Rapids (Kent); J. H. Jewell, M.D., Roseville (Macomb); John D. Monroe, M.D., Pontiac (Oakland); E. C. Galsterer, M.D., Saginaw (Saginaw); Olin L. Lepard, M.D., Sturgis (St. Joseph); Versa V. Cole, M.D., Caro (Tuscola); Henry A. Scovill, M.D., Ypsilanti (Washtenaw).

County Bulletin Editors.—Philip K. Stevens, M.D., Flint (Genesee); Wilfred N. Sisk, M.D., Kalamazoo (Kalamazoo); Walter J. Zimmerman, M.D., Royal Oak (Oakland).

County Society Public Relations Chairmen.—John W. Bunting, M.D., Alpena (Alpena); A. B. Gwinn, M.D., Hastings (Barry); Robert E. Reagan, M.D., Benton Harbor (Berrien); Evan L. Copeland, M.D., Decatur (Van Buren); George E. Anthony, M.D., Flint (Genesee); E. S. Oldham, M.D., Breckenridge (Gratiot-Isabella-Clare); W. J. Herrington, M.D., Bad Axe (Huron); David Kahn, M.D., Lansing (Ingham); Edward C. Lake, M.D., Jackson (Jackson); Glen Callander, M.D., Kalamazoo (Kalamazoo); Jack Hoogerhyde, M.D., Grand Rapids (Kent); F. A. Merlo, M.D., Big Rapids (Mecosta-Osceola-Lake); W. S. Jones, M.D., Menominee (Menominee); R. A. Frary, M.D., Monroe (Monroe); Victor Curatolo, M.D., Mt. Clemens (Macomb); Harold Dykhuizen, M.D., Muskegon (Muskegon); Edgar J. Geist, Jr., M.D., Rochester (Oakland); John H. Kitchell, M.D., Grand Haven (Ottawa); John M. Jacobowitz, M.D., Three Rivers (St. Joseph).

MSMS Council.—W. S. Stinson, M.D., Bay City (Bay Arenac-Iosco); Wilfrid Haughey, M.D., Battle Creek (Calhoun); G. B. Saltonstall, M.D., Charlevoix (Charlevoix); Kenneth H. Johnson, M.D., Lansing (Ingham); O. B. McGillicuddy, M.D., Lansing (Ingham); Ralph W. Shook, M.D., Kalamazoo (Kalamazoo); C. Allen Payne, M.D., Grand Rapids (Kent); H. B. Zemmer, M.D., Lapeer (Lapeer); D. Bruce Wiley, M.D., Utica (Macomb); Wm. M. LeFevre, M.D., Muskegon (Muskegon); G. Thomas McKean, M.D., Detroit (Wayne); A. E. Schiller, M.D., Detroit (Wayne); B. M. Harris, M.D., Ypsilanti (Washtenaw).

Executive Secretaries of County Medical Societies.—Sara M. Warren, Flint (Genesee); Robert O. Kinsman, Grand Rapids (Kent); Lucy W. Bartlett, Muskegon (Muskegon); James O. Devereaux, Pontiac (Oakland); Else Kolhede, Detroit (Wayne).

Woman's Auxiliary Representatives.—Mrs. R. E. Reagan, Benton Harbor (Berrien); Mrs. A. C. Stander, Saginaw (Saginaw); Mrs. C. Allen Payne, Grand Rapids (Kent).

Michigan State Medical Assistants Society Representatives.—Mrs. Eileen DeWent, Holland (Ottawa); Doris E. Jarrad, Lansing (Ingham); Marlouise Redman, Detroit (Wayne).

MSMS Public Relations Committee.—James Millard, M.D., Middleville (Barry); W. G. Gamble, M.D., Bay

City (Bay-Arenac-Iosco); Tony J. Trapasso, M.D., Sault Ste. Marie (Chippewa-Mackinac); W. Z. Rundles, M.D., Flint (Genesee); J. L. Leach, M.D., Flint (Genesee); R. L. Thirlby, M.D., Traverse City (Grand Traverse-Leelanau-Benzie); S. E. Andrews, M.D., Kalamazoo (Kalamazoo); L. E. Grate, M.D., Charlevoix (Northern Michigan); C. L. Weston, M.D., Owosso (Shiawassee); F. E. Ludwig, M.D., Port Huron (St. Clair); R. W. Teed, M.D., Ann Arbor (Washtenaw); Sidney E. Chapin, M.D., Dearborn (Wayne); Edwin H. Fenton, M.D., Detroit (Wayne); E. C. Long, M.D., Detroit (Wayne).

Participants on the Program.—L. Fernald Foster, M.D., Bay City; G. W. Slagle, M.D., Battle Creek; John M. Wood, M.D., Mt. Pleasant; C. Allen Payne, M.D., Grand Rapids; James Doty, M.D., Lapeer; D. Bruce Wiley, M.D., Utica; Walter A. Meier, M.D., Monroe; Wm. M. LeFevre, M.D., Muskegon; W. S. Jones, M.D., Menominee; G. N. Petroff, M.D., Pontiac; B. M. Harris, M.D., Ypsilanti; R. W. Teed, M.D., Ann Arbor; Luther R. Leader, M.D., Detroit; Jay C. Ketchum, Detroit; John Reid, East Lansing; James M. Gillen, Detroit; Donald H. Stubbs, M.D., Washington, D. C.; Arch Walls, M.D., Detroit; Clyde F. Cairry, DVM, East Lansing; John R. Rodger, M.D., Bellaire; R. J. Hubbell, M.D., Kalamazoo; L. Howard Schriver, M.D., Cincinnati, Ohio; C. D. Selby, M.D., Port Huron.

Guests.—W. W. Boyles, Detroit; Donna Marie Buchanan, Imlay City; R. J. Burns, Ann Arbor; Mrs. Dorothy Callander, Kalamazoo; Verne Collett, Detroit; Kenneth Cook, Sault Ste. Marie; Arthur Clements, Detroit; R. H. McDonough, Grand Rapids; Mrs. John V. Fopeano, Kalamazoo; L. H. Freye, Detroit; Mrs. W. G. Gamble, Bay City; Louis Graff, Detroit; L. Gordon Goodrich, Detroit; Jack Kantner, Lansing; Mrs. Wanda M. Lake, Jackson; Mrs. Wm. M. LeFevre, Muskegon; Mrs. N. L. Lindquist, Escanaba; Mrs. F. E. Ludwig, Pt. Huron; John Nelson, Pontiac; Harry Parke, Lansing; Thomas Paton, Detroit; Mrs. Edwin Pearson, Kalamazoo; Jeannette Phillips, Kalamazoo; Charles Rickett, Detroit; Mrs. Howard Robinson, Detroit; Miss Helen Schick, Detroit; Mrs. Lynn Stinson, Bay City; Mrs. H. C. Tellman, Bay City; Franz Topol, Kalamazoo; Miss Kay Topp, Detroit; John E. Verbiest, Detroit; E. H. Wiard, Lansing.


MSMS ANNUAL MEETING

September 25-26-27, 1957

Civic Auditorium, Pantlind Hotel

Grand Rapids

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"Tom" had tuberculosis. And in this latest Parke-Davis message on the cost of medical care, "Tom's case" is used as a specific example of the heartening progress being made against sickness and disease.

The ad points out that, thanks to earlier detection, improved surgery and the anti-tuberculosis drugs, tuberculosis has fallen from first to sixth place among the ten leading causes of death.

Unfortunately, most people do not appreciate the priceless value of today's more effective medical care until they come face to face with a dread disease—like "Tom". And that's why, with a colorful new series of advertisements,* Parke-Davis is helping to give your patients a new and clearer understanding of what modern medical care can do for them—in terms of getting them well quicker, back on the job again, and even saving their lives.

In short, we're continuing to tell your patients that prompt and proper medical care may well turn out to be the biggest bargain ever to come their way.

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You and Your Business

AMERICAN BOARD OF OBSTETRICS AND GYNECOLOGY

Applications for certification (American Board of Obstetrics and Gynecology), new and reopened, for the 1958 Part I Examinations are now being accepted. All candidates are urged to make such application at the earliest possible date. Deadline date for receipt of applications is September 1, 1957. No applications can be accepted after that date.

Candidates for admission to the Examinations are required to submit with their application, a typewritten list of all patients admitted to the hospitals where they practice, for the year preceding their application, or the year prior to their request for reopening of their application. This information is to be attested to by the Record Librarian of the hospital or hospitals where the patients are admitted and submitted on paper 8½ x 11". Necessary detail to be contained in the list of admissions is outlined in the Bulletin and must be followed closely.

Current Bulletins outlining present requirements may be obtained by writing to the Secretary's office: Robert L. Faulkner, M.D., American Board of Obstetrics and Gynecology, 2105 Adelbert Road, Cleveland 6, Ohio.

PERSONNEL EXPERIENCE AS WELL AS PROFESSIONAL

Career medical officers of the Army could profit from an assignment in the Personnel Division of the Office of The Surgeon General of the Army, says Col. Joseph H. McNinch who concluded a nineteen-month tour as chief of that division, January 24, 1957.

He has been named Chief Surgeon, U. S. Army Forces in the Far East and his parting message to his co-workers was that this personnel tour had been the most enjoyable and profitable he has experienced in the Army.

"I came to Washington with misgivings because I had thought I was to continue in preventive medicine,

a field I like very much, but I have learned so much about the effect of good personnel administration on the success of our medical mission that I now wish that every Army Medical Service officer could have a similar detail as part of his or her career.

"It is the best method I know for introducing the medical service officer to the importance of clear communication lines between himself and those upon whom he depends to carry out his health objectives. Such an officer comes to understand the value of recognizing the individual problems of his military or civilian staff, professional or otherwise, and I believe very firmly that he or she will be a better medical officer as a consequence."

"Each one of us has already personally benefited from your accomplishments but the benefits to be realized by the Army Medical Service and the Army itself are even more important. Improved assignment and personnel policies result in happier people and better medical care for those we serve."

ARMY'S FIRST INTERNS FOR CLASS ONE HOSPITALS

Fourteen June graduates of medical schools approved by the American Medical Association will report for duty at the U. S. Army Hospital, Fort Benning, Georgia, July 1, 1957, to inaugurate the first internships yet instituted for the Army's Class I hospitals.

This will be a "pilot" program directed toward the introduction of such training in other hospitals of this classification.

Applications for Army medical internships have exceeded by far in recent years the number of openings available at the Army's named teaching hospitals. This has brought about a need to expand the intern training programs to accommodate more of the young physicians interested in Army professional training.

A total of 150 medical school graduates are now admitted to the established intern training programs at the Army's named teaching hospitals but for current training years, many more than this number have been received by The Surgeon General.

Army educational authorities indicate that the conduct of an intern training program helps improve the quality of patient care at the hospitals concerned.

MEDICAL MEETINGS AND CLINIC DAYS

A list of known medical meetings and clinic days, sponsored by county medical societies and other physician groups in Michigan, follows:

1957

Spring

May 2

May 5-10

June 21-22

July 11-13

Sept. 25-27

MSMS Postgraduate Extramural Courses

Ingham County Clinic Day

Sixth International Congress of Otolaryngology

Upper Peninsula Medical Society

Mid-Summer Session of The Council, MSMS

MSMS Annual Session

Statewide

Lansing

Washington, D. C.

Calumet

Mackinac Island

Grand Rapids

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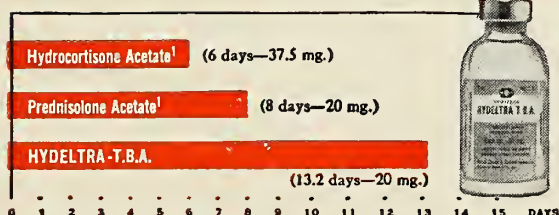
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in *COLLATERAL
LIGAMENT
STRAINS*—
allows early
ambulation—
relieves pain
and swelling



Rheumatoid arthritis
Osteoarthritis
Acute gouty arthritis
Bursitis
Sprains
Tendinitis
Trigger finger
Peritendinitis
Trigger points
Tennis elbow
Lumbosacral strain
Capsulitis
Frozen shoulder
Coccydynia
Rheumatoid nodules
Fibrositis
Tensor fascia lata
syndrome
Collateral ligament
strains
Radiculitis
Osteochondritis
Ganglia

Duration of relief
exceeds that
provided by any
other steroid
ester



Dosage: the usual intra-articular, intra-bursal or soft tissue dose ranges from 20 to 30 mg. depending on location and extent of pathology.

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¹ Hollander, J. L., Paper read at conference in New York City, May 31 and June 1, 1955

Toast to the President

The Saginaw Club for forty-five years has held a New Year's banquet for the members and their sons at which a Toast is given to the President. This year J. Edward Manning, M.D., President of the Saginaw County Medical Society, had the honor, and made such an outstanding contribution, we are pleased to make the speech available to our members. The text of Dr. Manning's toast follows:

Mr. President, members of the Saginaw Club, your sons and guests.

First, I would like to wish all of you a healthy, happy, and prosperous New Year.

I would also like to ask you to give thought to our members and friends who have left us during the past year; particularly poignant to me is the loss of Geoffrey Childs but a few weeks ago. He, incidentally, to the best of my knowledge, was the only member to have given the New Year's Toast two times.

This is the 45th consecutive New Year's Day that the members of this Club and their sons have met to toast the President of the United States. The fact that this splendid tradition has continued through the years; that so many men and their sons should be willing to leave warm homes on cold winter days to assemble here to toast the President caused me to wonder why they did; what force, beliefs or loyalties caused them to pay their respects on the first day of each New Year. It seemed to me that it must be a deep and compelling attachment to the Presidency rather than loyalty to the man occupying the office at the moment alone. There have been years when the political climate of this room would have offered small solace to the holder of the office as an individual although the loyalty to the Presidency was of highest titer. The more I thought of this continuing phenomenon the more intrigued I became with the actual institution that is the presidency.

While the following is without doubt familiar knowledge to the members here gathered, I feel that the sons may enjoy following my musings. I thought about the origin of the Presidency; about the men who have held the office, of the growth of the office as each holder added some impress to it; some little, others more, but nine, I think, detracting. The Presidency has grown in stature and in power through the years and it is the men who have held the office that have made it the splendid institution we toast here today.

After having declared their independence from England on July 4, 1776, the 13 original states had had their fill of strong government and were in no appetite for more of the same despite the fact that they had signed the Articles of Confederation and Perpetual Union confusion grew worse confounded and chaos reigned. Ultimately even these rugged individualists realized that some union must come on Sept. 17, 1787, after 16 weeks of debate, the Constitutional Convention adopted the Constitution and in so doing brought forth, with sincere doubts and misgivings, the office of President of the United States.

The Constitution, as you know, is an amazingly simple document regarding the Presidency. It says mainly that "the Executive Power shall be vested in a President" and that he "shall be commander in chief of the Army and Navy," and he could also make treaties, but only with the consent and advice of the Senate. Certainly a benign definition of an almost empty sounding office. As a matter of fact the Constitution

was almost not ratified by Pennsylvania because of the "contemptible weakness" of the office of President—he would be merely a pageant of state, they said, and a ceremonial officer rather than a help in the quest for a more perfect union.

President Washington's main task was to erect and staff the governmental structure and to get it going. The problems were chiefly domestic; establishment of public revenue and credit; creation of a military establishment and the encouragement of commerce and manufacturing as an aid to agriculture. All this, of course, in a small area of the Eastern Seaboard containing four million people.

Traveling Presidents are not new, it seems, for Washington traveled over all of New England and made a 1,900-mile tour of the deep South by coach. Thus, long before the age of "mikes" and nationwide hookups he saw the face of the people and made the coach-and-four his channel for communication.

When Washington left office he had had eight hard years and in them had founded the office of the President, discovered the chief of its powers and made them into tools for those who would follow.

When Thomas Jefferson took office on March 4, 1801, we had in him the master politician of his day and generation and it is probable that, with Lincoln, he remains to this day the consummate practitioner of that art.

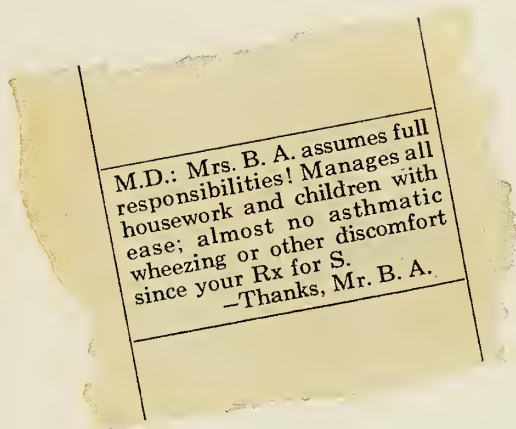
The Louisiana Purchase was the outstanding event of Jefferson's Presidency and besides doubling the size of the United States it brought about the first downfall of the policy of strict interpretation of the Constitution. Before Napoleon's moody irascibility caused him to change his mind about selling this huge plot for a pittance, Jefferson had to move fast; he had no time to call Congress to amend the Constitution to make legal such a purchase and so, casting caution to the four winds, he bought it and then called Congress to ratify the act. It was the first example of administration by "trust and discretion" rather than by definition and all decisions of later American history have been in some way affected by this action.

Jefferson also established the importance of party leadership and was probably the most skillful "Chief of Party" among all the Presidents. This leadership was translated through its majority in Congress into the fact of control of the National Government. It was his example of the employment of this power which Woodrow Wilson and Franklin D. Roosevelt studied and put to good use.

Andrew Jackson brought immense new strength to the office in 1829 for there was no more determined creator of Executive Power than he. He greatly expanded the powers of President in his two greatest battles—one in which he defeated the privately-owned Bank of the United States and in the other defeated South Carolina's notion that the State could veto the will of the Nation. It was he who then proposed the famous toast "Our Union, it must be preserved." Old Hickory, with his great moral courage, added luster and power to the office by bringing the banking of Federal funds under Government control and by holding the well-being of the Union above individual State's rights.

Abraham Lincoln faced problems more formidable than any other President when he entered office. In meeting these problems no other President ever found so many sources of executive power nor so expanded and perfected those already in use. With the Nation's great

(Continued on Page 428)



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TOAST TO THE PRESIDENT

(Continued from Page 426)

troubles before him he seized upon the Presidential designation as Commander in Chief and coupled to it the first sentence of Article II of the Constitution:

"The Executive Power shall be vested in a President of the United States" and joined them as the "War Power" which authorized him to do many things beyond power of Congress. In two years what had begun as a transition device grew into an independent power under which Lincoln felt authorized to suspend the execution of the writ of habeas corpus, issue the Emancipation Proclamation and restore reoccupied States. The above and much more by Lincoln added, obviously tremendously to Presidential power.

At the end of Theodore Roosevelt's 7½ years in the White House the American people had quite a new concept of the Presidency for few men have conditioned it more!

Theodore Roosevelt felt that the executive power "was limited only by the specific restrictions and prohibitions appearing in the Constitution or imposed by Congress" and rejected the theory that what was necessary for the nation could be done by the President if he could find some specific authority to do it. He insisted it was not only his right but his duty "to do anything that the needs of the nation demanded unless specifically forbidden by the constitution or laws." It was this broad and positive concept that he as President could do a thing unless specifically forbidden to do so rather than the previous relatively negative stand that he could only do it if he had definite authorization that added tremendous power to the Presidency and also characterized Theodore Roosevelt's incumbency.

He also brought to the office the conviction that the United States could no longer hold herself safe in the cocoon of isolation and he took America into the world. He felt that we should take action in the organization of the affairs of the world. This meant colonies, a canal in Panama and thrusting the weight of this nation onto the scales that measured out the balance of power in Europe.

It was left for Woodrow Wilson, however, to finally commit this country to major use of Military Power outside of the United States and when in January, 1918, he made his famous speech on the Fourteen Points, for the first time in history arrangements had been made so that his speech appeared simultaneously in all the newspapers of all countries. This caused enormous pressure to be brought for this charter for a new world. This instant marked the first time that the utterances of the President of the United States had had impact upon and vital importance to all the people in the world. Surely the power and the influence of the office had gone far since Washington struggled with his 13 states and four million people.

The history of the Presidency presents no exact counterpart to Franklin D. Roosevelt's first 100 days in the White House. That his influence upon the Presidency during this acutely critical period and during the war years was great is unquestioned. However, his period in office is too recent and the emotional tides regarding him personally still run too high for the amateur (and, indeed, the professional) to sum up with justness his expansion of the power. It can be safely said, however, that Franklin D. Roosevelt added to the many Presidential roles that of World Strategist.

Thus, on looking back over the 168 years of this office one must certainly agree with the great Grover Cleveland when, with his heavy hand, he wrote: "Sir, it is a solemn thing to be the President of the United States" and we cannot help but think, too, how blessed we have been by the choices the people have made for this great honor. Even those men, who in history's merciless and often unjust light are considered to have

been weak or inadequate, were all great patriots doing the best they could and in most cases are seen, on closer study, to have been caught up in circumstances beyond their power or abilities to control. Never has there been question of Presidential loyalty or sincerity.

For 168 years our Presidency has been being built and molded by great hands, it has been watered by blood and tears, tempered by time and crises and warmed by the sun of patriotism until we have in it today the greatest power the world has ever known—being used as the greatest instrument man has yet devised for peace and individual freedom.

History will show us too that to the really great Presidents we are now adding another. We are even more fortunate than we know to have at this time as our President, controlling the almost unbelievable power that the office has become, a man of great ability, great honesty, great sincerity and dignity, great morals and great heart.

Gentlemen, I think I know why we meet here each New Year's Day and I would like to propose a toast to the Presidency and to the President of the United States.

AIN'T GOT TIME

Ain't got time to go a-fishing
Ain't got time to relax
Ain't got time to sit a-wishing
Got to pay my income tax.

Ain't got time for my family
Hardly know the children's names
Ain't got time to sit and listen
To their tales of childish games.

Ain't got time to romp and play
Ain't got time to go to church
Got to work 14 hours every day
Can't leave my business in the lurch.

Ain't got time for mirth or laughter
Ain't got time to take a drink.
Ain't got time for the hereafter
Ain't got time to sit and think.

Ain't got time to hit a golf ball
Ain't got time to sink a putt.
Got to give my very all
To keep the wolf from my hut.

Ain't got time for a vacation
That's all foolishness anyway.
I can get my recreation
Doing things that bring in pay.

Ain't no one can take my place
Ain't got time for story or fable.
Think I'll have to step up my pace
Got to make it while I'm able.
Ain't got—GOOD MORNING, GABRIEL!

C. F. HOLTON, M.D.

—*Journal of the Medical Association of Georgia*, October, 1955.

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AMA Washington Letter

THE MONTH IN WASHINGTON

The Army's Office of Dependent Medical Care, handling the new program that offers private medical care to service families, is working on some long—and some short-range plans of importance to state societies.

To meet a problem coming up in the next few months, the office is notifying states that contracts for physicians' services, negotiated through the state societies last fall, will be extended automatically when their expiration date of July 1 arrives. However, there is no definite time period set for any of the extensions; each contract will be continued in effect until that particular state's agreement has been renegotiated.

When the contract is extended, according to Maj. Gen. Paul I. Robinson, head of the Office of Dependent Medical Care, it will be possible to make necessary adjustments, but he hopes not too many changes will be asked at that time.

Then, after July 1, each state will be given 60 days' notification before Defense Department makes its final audit covering the period from December 7, 1956, when the program went into effect, through June 30, 1957. This audit has been promised in each state before renegotiation starts.

Both the state fiscal agents and Gen. Robinson's staff should be well prepared for renegotiations when the time arrives. No renegotiations will be undertaken until January, 1958. They will continue for most of next year, on a tentative schedule that calls for handling about five contracts per month.

Under this tentative arrangement, the contract with the Michigan State Medical Society will be renegotiated during the month of August.

* * *

If any large-scale health and medical program is to be pushed through Congress this year, most of the pushing will be done by the Democrats, who, in control on Capitol Hill, can get what they want, in theory at least.

Announcing that the idea of a special presidential health message had been dropped for this year, Secretary Folsom also said the Republican administration would press for only three major health-medical bills. All three, incidentally, were before Congress last year but were not acted upon. They are:

1. Federal assistance to medical, dental, and public health schools to help them build and equip new teaching facilities or improve and expand existing classrooms or labs.

2. Waiver of the anti-monopoly laws to permit

small companies (none doing more than one per cent of the total business) to pool some of their funds for experimental work in expanding voluntary health insurance.

3. Authorization for construction of sanitary facilities on Indian reservations.

In outlining these legislative objectives of the administration, the Secretary took the opportunity to make clear he doesn't think much of one bill that has the ardent support of some Democrats and of some labor leaders. It would have the U. S. pay for sixty days' free hospitalization annually for persons aged sixty-five and over who are under social security, and their dependents if also over sixty-five.

Mr. Folsom said the social security administration has all it can do administratively to put into effect the major amendments passed last year, and that besides the "hospitalization at sixty-five" plan skirts so close to the area of compulsory health insurance that it should be regarded cautiously.

NOTES:

A House committee, making a survey of the cost of veterans' programs, has been asked by VA Administrator Harvey Higley to ponder this question: Should more VA hospitals be constructed when we know beyond doubt that they will be largely for the benefit of non-service-connected cases?

* * *

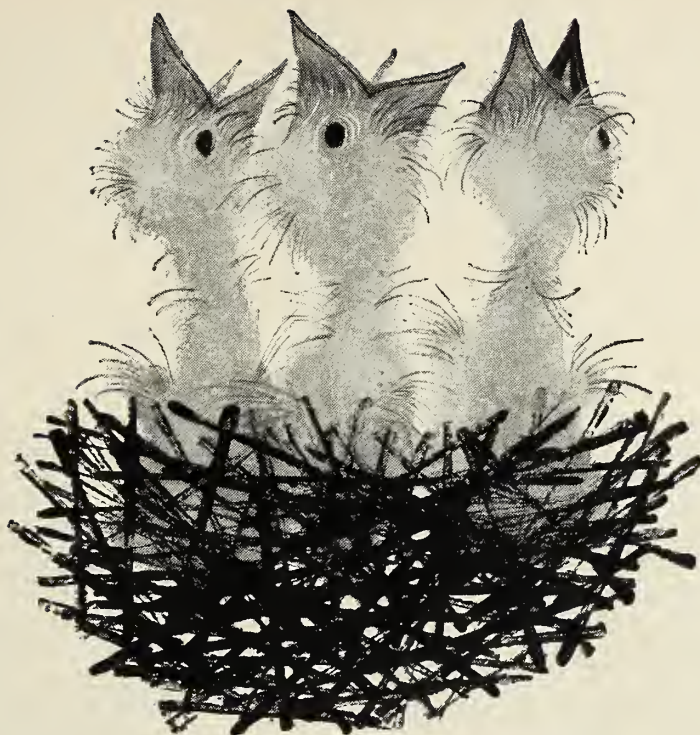
As anticipated, pressure already is on Congress to drop or lower the age 50 limit for OASI payments because of disability. Many bills have been introduced on the subject.

* * *

Congressmen are hearing again from the friends of the "Hoxsey cancer cure," which has been under constant attack by Food and Drug Administration but still manages to stay in business. Form cards, carrying space for a name and address, are being received on Capitol Hill, each asking Congress to investigate FDA for the way that agency has pressured the Hoxsey people.

* * *

An addition to the top echelon of the Department of Health, Education, and Welfare is a young (thirty-three) assistant to Secretary Folsom, who holds both medical and law degrees. He is Dr. Robert H. Hamlin, of Brookline, Mass. Another HEW addition is John A. Perkins, Ph.D., president of the University of Delaware, the new Under Secretary.



children are often this eager...

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Supply: Bottles of 8 ounces and 1 pint.

1 teaspoonful (5 cc.) supplies:

Elemental Iron	38 mg.
(as ferric ammonium citrate and colloidal iron)	
Vitamin B ₁₂ activity concentrate	4 mcg.
Thiamine mononitrate	1.0 mg.
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Pyridoxine hydrochloride	0.5 mg.

Alcohol content: 12 per cent

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AMA News Notes

OUTSTANDING MEDICAL MEETING PLANNED

Physicians attending the AMA's 106th Annual Meeting in New York City June 3-7 will find a star-studded revue of exhibits, scientific lectures, medical films and color television programs lined up for their pleasure and enlightenment. Approximately 18,000 physicians from all over the country are expected to participate in this world-famous "short course" in postgraduate medical education. Focal point of the scientific program will be the Coliseum—New York's new exhibition hall—with four floors devoted to technical and scientific exhibits, many of the scientific meetings and the color television program. A number of section meetings plus the scientific film program will be held in hotels near the exhibit hall. Headquarters for the House of Delegates will be the Waldorf Astoria.

An outstanding scientific lecture program is being arranged by the Council on Scientific Assembly. Kicking off the general scientific program on Monday morning, June 3, will be a review of recent progress in surgery while the afternoon session will deal with recent advances in medicine. Tuesday morning's general meeting will feature a discussion on the use and abuse of mood-altering drugs in daily practice.

Formal section meetings will run from Tuesday afternoon through Friday morning. Many of the sections will combine to present special symposiums and panel discussions. The Section on Miscellaneous Topics is arranging sessions on allergy, legal medicine with a mock trial involving the testing of drinking drivers, and methods of improving communication in medicine. A number of exhibit-symposiums and question-and-answer conferences also will be held. Special exhibits on fractures, diabetes, perinatal mortality, pulmonary function testing, fresh tissue pathology, arthritis, and nutrition also will be presented.

The color television program presenting live surgical procedures from Roosevelt Hospital will again be sponsored in co-operation with Smith, Kline & French Laboratories.

A foreign air is being added to the regular medical film program for the first time. More than twenty foreign countries are sending special films dealing with many aspects of medical science to the "international medical film program." Both the international and regular film programs will be held at the Barbizon Plaza Hotel.

Registration officially opens at the Coliseum Monday at 8:30 a.m. and closes Friday noon. Advance registrations will be accepted Sunday from 12 noon to 4:00 p.m. The exhibit hall will be open to "doctors only" on Tuesday and Wednesday mornings to give physicians an opportunity to circulate more freely among the technical and scientific exhibits. For your comfort, the new Coliseum has many facilities, including air conditioning, escalators, elevators, a cafeteria, and snack bars.

Physicians and their wives should plan now to attend this worthwhile medical conclave. Further details will be published in the *Journal of the AMA*.

FIRST INTERNATIONAL FILM PROGRAM

A unique selection of foreign-made medical films will be shown for the first time at the American Medical Association's 106th Annual Meeting June 3-7 in New York City. So far, twenty countries have submitted applications to this "international medical film program." Chief purpose of the program is to bring to the attention of doctors attending the convention some of the outstanding motion pictures produced abroad dealing with many aspects of medicine and surgery. A great many foreign physicians have already indicated an interest in the program.

Another aim will be to afford representatives of the United States and foreign countries the opportunity of discussing the possibilities of lifting existing customs barriers which make it practically impossible to exchange such motion pictures.

This program has been arranged by the AMA in co-operation with Johnson and Johnson, New Brunswick, N. J. Mr. Ralph Creer, director, AMA Motion Pictures and Medical Television, and a special committee have been screening more than 75 applications with an eye to selecting the most unusual and varied program for physicians.

The international exhibition and the regular program of domestic scientific films will be held in separate rooms of the Barbizon Plaza Hotel, located within two blocks of the Coliseum.

AUXILIARY WINNERS IN "TODAY'S HEALTH" CONTEST

Winners in the *Today's Health* "Operation Christmas" subscription contest recently received ten dollar checks as prizes for their outstanding efforts. The 1956 winning auxiliaries include: Group I—Washington County, Oregon; Group II—Indiana County, Pennsylvania; Group III—Escambia County, Florida; Group IV—Los Angeles County, California.

TWO NEW EXHIBITS AT JUNE MEETING

Two new AMA scientific exhibits designed primarily for physicians will be unveiled at the Annual Meeting in June in New York City. These displays are being prepared jointly by the Bureau of Exhibits and (1) the Bureau of Health Education and (2) the Council on Foods and Nutrition. Both will be available on a loan basis to medical societies after the Annual Meeting.

1. "Health Appraisal of the School Child"—presents five factors involved in a complete appraisal program, including teacher observation, screening procedures, dental and medical examinations, and the follow-through. A

(Continued on Page 438)

Dexamyl^{*} (a combination of dextro-amphetamine sulfate, S.K.F., and amobarbital) induces a mood of cheerfulness and optimism. Often, this is all that is needed to help the aged overcome their loneliness, the resentful feeling of being unwanted, the fears (imagined or real) of physical failings.

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Smith, Kline & French Laboratories, Philadelphia

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PR REPORT

NATION APPLAUDS MUSKEGON'S ACTION

On Wednesday, February 27, the entire nation heard the story of how the Muskegon County Medical Society had come to the aid of one of its members. This is the story.

Edward V. Williams, M.D., became ill on Sunday, February 24. It was tuberculosis. The next day he was sent to a sanitarium where it was expected he would spend at least six months. This meant that Dr. Williams' large practice would have to be covered by others during his absence.

A special meeting of doctors—members of the Muskegon County Medical Society—was called for Monday night and the entire Society met in special session Tuesday evening to consider what might be done for their colleague and for his patients. The president, Emil J. Lauretti, M.D., appointed a special committee which was scheduled to meet the following night.

The committee, composed of R. T. Allen, M.D., H. Clay Tellman, M.D., Norbert W. Scholle, M.D., Norman A. Fleishman, M.D., and Ralph V. August, M.D., took this action:

1. The Society has made this committee available to Dr. Williams and through it desires to help him on all problems, including personal finances, which he wishes to present to it.
2. The committee recommends that Dr. Williams consider the placement of his office finances and collections with a professional organization.
3. The committee recommends that the members of our society on a voluntary basis forward to the County Society treasurer a sum equal to twenty-five per cent (25%) of their collections from the care of Dr. Williams' patients during the ensuing six (6) months. This total sum to be forwarded by the County Society to Dr. Williams.
4. The committee recommends that the President of our Society forthwith appoint a committee for the express purpose of inducing negro physicians to settle here and practice in our midst.
5. The committee recommends that the Society investigate the availability of financial assistance to newly situated practitioners in our community.

And as a quick public relations follow-up, the Committee issued the following press release:

"The Muskegon County Medical Society regrets the sudden illness of Dr. Williams and sympathizes with his patients in their loss from active practice of an able physician and a friend. We also will

miss the work of a fine colleague and friend. The medical society through the individual physicians offices, the emergency services of Mercy and Hackley Hospitals and the emergency medical telephone service will provide medical service for Dr. Williams' patients."

As a result of the Society's speedy and considerate actions, the nation's attention was focused on Muskegon. The NBC radio network, AP and UP wire services, local newspapers and large dailies all carried the story.

The *Detroit Free Press*, on March 4, 1957, made this editorial comment in tribute to the humanitarian principle for which the medical profession stands.

MUSKEGON GIVES A TELLING REBUKE

The press of the entire country has carried the story about members of the Muskegon County Medical Society taking over the practice of a Negro doctor who has been stricken with tuberculosis.

Eighty Muskegon doctors, most of them white, have agreed to look after the patients of Dr. Edward Williams for the year in which he will be confined in a sanitarium. They are working out a schedule to handle his office calls, and the fees will go to the ill physician.

This wouldn't particularly be news if the chief figure in the story wasn't a Negro and the other doctors white. That sort of thing under somewhat different circumstances is common practice in the medical profession as well as in other categories of human relationships.

The incident attracted attention only because it revealed that decent feelings of humanity know no barrier of race or creed. It stands as a sharp rebuke to the purveyors of hate wherever they may be plying their insidious trade.—Reprinted from *The Detroit Free Press*.

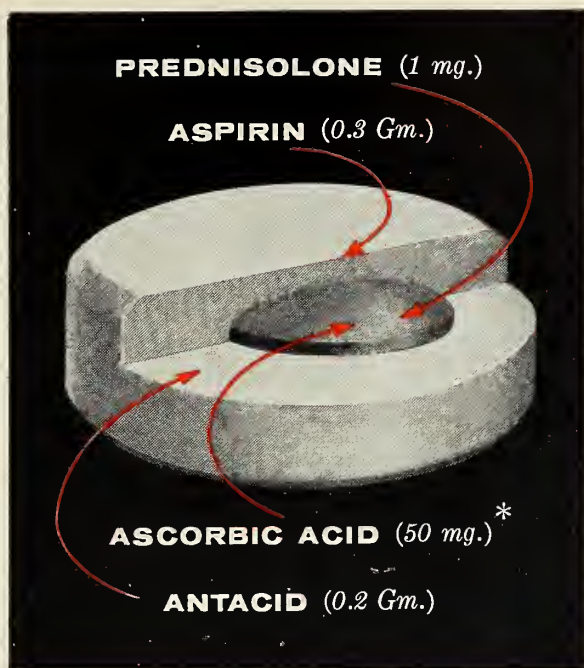
OPERATION ARMOR

Early in March, the MSMS Operation Armor spotlight turned its focus to the fourteen to forty age group, when appeals went to all county medical societies for help in overcoming this segment of the public's apathy towards polio immunization.

Latest reports indicate paradoxically that the overwhelming success of this second phase of the Michigan M.D.s' campaign to stamp out polio might have replaced a January glut of Salk vaccine with a March shortage.

The component county medical societies proposed various publicity and immunization plans, reflecting divergent needs and conditions in different parts of the state. In the majority of cases, however, such as in *Lapeer, Shiawassee, Macomb, Van Buren, Wayne* and *Ingham* counties, patients were urged, through the press, radio and TV, to get their shots in their doctors'

(Continued on Page 442)



Proper formula for treating "Rheumatism" patients



With TEMPOGEN, many patients obtain adequate relief from immobilizing "rheumatic" pain with lower hormone dosages than are ordinarily required, because of the enhanced antirheumatic effect provided by the prednisolone-salicylate combination. In addition, the likelihood of the occurrence of gastric distress or adrenal ascorbic acid depletion is minimized.

INDICATIONS: Early rheumatoid arthritis, rheumatoid spondylitis, osteoarthritis, Still's disease, psoriatic arthritis, bursitis, synovitis, tenosynovitis, myositis, fibrositis, and neuritis.

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AMA Annual Congress on Medical Education

At the recent meeting of the Congress on Medical Education, held February 9-12, 1957, at the Palmer House, Chicago, both H. G. Weiskotten, M.D., chairman, and Edward L. Turner, M.D., secretary, Council on Medical Education and Hospitals of the American Medical Association, stressed the urgency and desirability of providing more adequate graduate education for General Practice. It was evident from their language that they were stating the official policy of the AMA. William Hildebrand, M.D., Menasha, Wisconsin, former president, American Academy of General Practice, outlined what he believed to be adequate graduate education for the generalist. The traditional year of rotating internship, followed by an intensified year of residency with the same status accorded the general practitioner as the residents in the various specialties enjoy, is projected as a start. He stressed the necessity of developing a degree of clinical judgment that would enable the generalist to recognize his limitations as well as his capabilities. Hospital privileges must be increased as the demonstrated abilities of the generalist increase.

A very interesting panel discussion followed on what should constitute graduate education for general practice today, from the point of view of the leading specialties. William B. Bean, M.D., Professor of Medicine, State University of Iowa, College of Medicine, spoke for Internal Medicine. Charles B. Puestow, M.D., Clinical Professor of Surgery, University of Illinois College of Medicine, presented the attitude of Surgery. Pediatrics was represented by Philip S. Barba, M.D., Associate Professor of Pediatrics, School of Medicine and Graduate School of Medicine, University of Pennsylvania. Obstetrics and Gynecology had their point of view explained by Lawrence M. Randall, M.D., Professor of Obstetrics and Gynecology, Mayo Foundation, Graduate School of Medicine, University of Minnesota; chairman, Section on Obstetrics and Gynecology, Mayo Clinic. M. Ralph Kaufman, M.D., Clinical Professor of Psychiatry, Columbia University College of Physicians and Surgeons; Chief of Psychiatry, Mount Sinai Hospital, New York City, spoke for Psychiatry.

Most of the panelist expressed the opinion that a relatively large share of their specialty could be, more or less, adequately covered in the available time. The exceptions were the surgeon and the psychiatrist. Dr. Puestow stated he was unalterably opposed to any program that contemplated anything less than four years of surgical training. He voiced strenuous opposition to turning out half-trained surgeons. Dr. Kaufman was doubtful that his specialty could contribute enough

of its discipline to be worthwhile in the projected residency for the generalist.

Since the majority of patients will, in the foreseeable future, continue to be cared for by the generalist, it is imperative that ways and means be found to more adequately prepare our graduates who are entering general practice. The specialties, particularly surgery and psychiatry, should become more realistic. At the present time 80% of surgery is done by generalists, therefore, any amount of training is bound to improve the situation. There will never be enough psychiatrists, in all probability, to treat the ever increasing load of mentally disturbed, so even a minimum of instruction in this field will improve patient care.

This entire subject of more adequate training in general practice residencies, as well as subsequent hospital privileges will, without doubt, be incorporated in numerous resolutions to be introduced at the forthcoming House of Delegates Meeting of the AMA in New York in June.

F. P. RHOADES, M.D.,
*Member MSMS Postgraduate
Medical Education Committee*

PR DOCTOR TIP OF THE MONTH

Many county medical societies have found interprofessional meetings with other health groups to be invaluable in solving mutual problems or settling between-profession conflicts. Instead of waiting for the suggestion of a meeting to come from another group—why not evaluate your 1957 PR agenda right now. Have you scheduled meetings with local lawyers, dentists and pharmacists?

AMA ADVANCE REGISTRATION CARDS

Invitations, including a request form for an advance registration card for the American Medical Association New York meeting, June 3-7, have been mailed to 44,000 member physicians in seven eastern states—Connecticut, Delaware, Massachusetts, New Jersey, New York, Pennsylvania, and Rhode Island.

A total of 1,513 requests for advance registration cards have been received from AMA members to date and it is expected that 4,000 more requests will be received between now and April 20 when the convention program will be published in the AMA Journal.

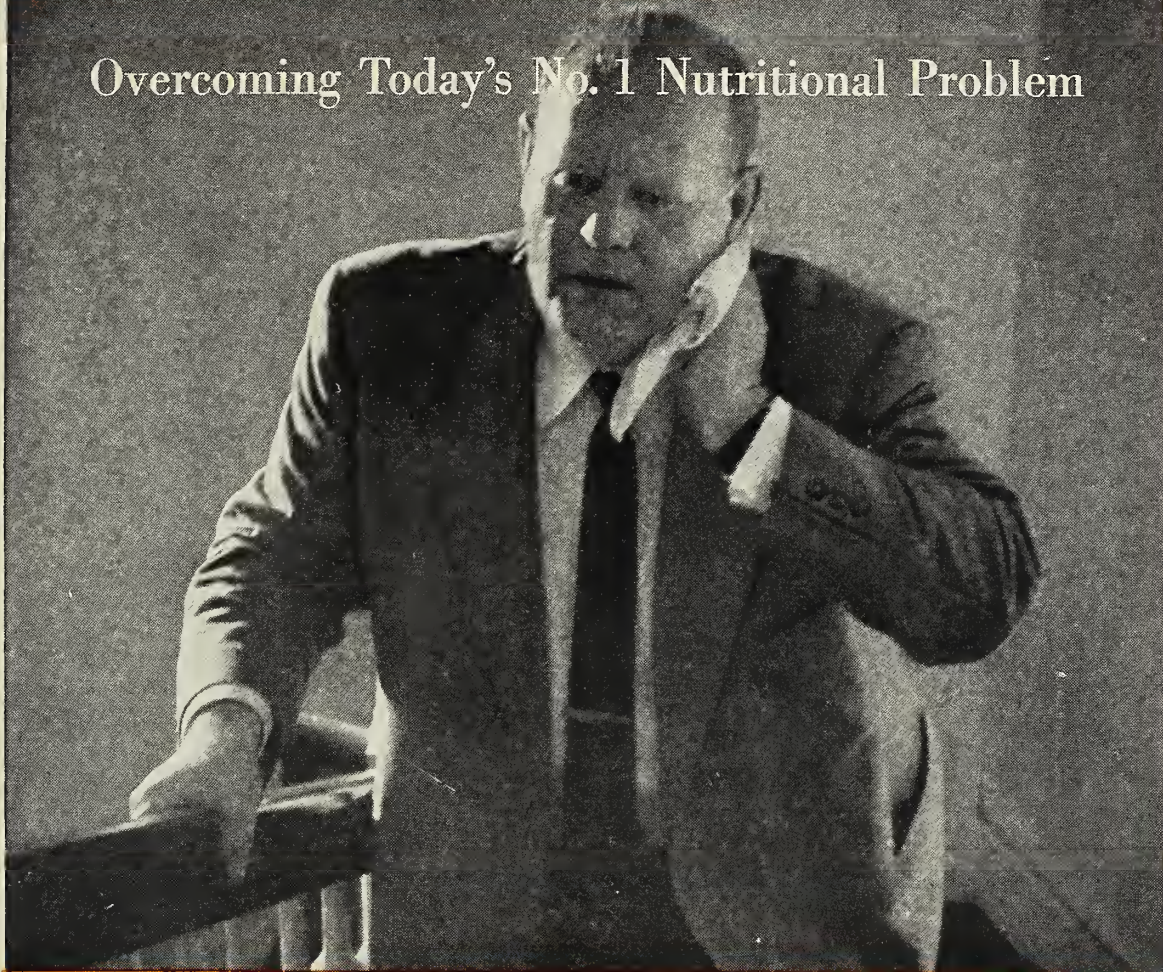
Physicians are reminded that they can speed up their trip through the registration area by requesting and receiving an advance registration card before May 10.

The technical and scientific exhibits at the New York Coliseum will be open from 8:30 a.m. Monday, June 3, and daily thereafter from 8:30 to 5:30, closing at noon on Friday, June 7.

On Tuesday, June 4, and on Wednesday, June 5, the technical and scientific exhibits will be open **ONLY** to AMA member physicians from 8:30 a.m. until 12 noon.

KNOX PROTEIN PREVIEWS

Overcoming Today's No. 1 Nutritional Problem



Knox "Choice of Foods" Diet Can Help Your CARDIAC Patients Lose Weight Successfully



1. Color-coded diets of 1200, 1600 and 1800 calories are based on nutritionally-sound Food Exchanges.¹
2. Easy-to-use Food Exchanges (referred to in the Knox booklet as Choices) eliminate calorie counting by patient.
3. Diets promote accurate adjustment of caloric levels to the special needs of the patient yet allow each individual considerable latitude in the choice of foods.
4. More than six dozen appetizing, low-calorie recipes are presented on the last 14 pages of each diet booklet.

1. The Food Exchange Lists referred to are based on material in "Meal Planning with Exchange Lists" prepared by Committees of the American Diabetes Association, Inc., and The American Dietetic Association in cooperation with the Chronic Disease Program, Public Health Service, Department of Health, Education and Welfare.

Chas. B. Knox Gelatine Co., Inc.
Professional Service Dept. SJ-24
Johnstown, N. Y.



Please send me dozen copies of the new illustrated Knox Reducing booklet based on Food Exchanges.

Your Name and Address

Cancer Comment

MICHIGAN CANCER CO-ORDINATING COMMITTEE MAKES PROGRESS THROUGH UNITY

The Michigan Cancer Co-ordinating Committee was created November 12, 1953, as a voluntary, co-operative effort of representatives of the following State agencies interested in cancer control:

American Cancer Society, Michigan Division, Inc.
American Cancer Society, Southeastern Michigan Division
Michigan Department of Health
Michigan Health Officers Association
Michigan State Dental Society
Michigan State Medical Society

During its early years, the Cancer Co-ordinating Committee justified its existence by encouraging more cancer education—both professional and public. It also urged each of its component members to further their endeavors in a co-ordinated non-overlapping program in line with its purpose to help develop and maintain a more efficient and effective, complete dynamic cancer control program in Michigan.

The Michigan Cancer Co-ordinating Committee activates its member organizations to greater effort in the fight against cancer. It is in effect a "stimulator" of activity on the part of the formalized groups which compose it.

Publications of the Michigan Cancer Co-ordinating Committee for the public include:

The Story of Cancer For High Schools
Strength Through Unity Against Cancer

The personnel of the Michigan Cancer Co-ordinating Committee for 1957 is:

Name	Organization
H. M. Nelson, M.D., Chairman	S.E. Mich. Div., American Cancer Society
Charles F. Arnold	S.E. Mich. Div., American Cancer Society
J. A. Cowan, M.D.	Michigan Department of Health
M. A. Darling, M.D.	S.E. Mich. Div., American Cancer Society
Mr. W. F. Doyle	Michigan Div., Inc., American Cancer Society
J. D. Heaslip, M.D.	Michigan Health Officers Association
L. E. Holly, M.D.	Michigan Div., Inc., American Cancer Society
W. A. Hyland, M.D.	Michigan State Medical Society
J. W. Hubly, M.D.	Michigan State Medical Society
W. A. Irwin, M.D.	Michigan State Medical Society
B. E. Luck, D.D.S.	Michigan State Dental Association
C. Allen Payne, M.D.	Michigan Div., Inc., American Cancer Society
E. T. Thieme, M.D.	Michigan State Medical Society

For further information and copies of publications, write Michigan Cancer Co-ordinating Committee, attention of William J. Burns, Secretary, Box 539, Lansing 3.

AMA NEWS NOTES

(Continued from Page 432)

series of colored slides demonstrating each of these major phases also will be presented. This exhibit will be of interest not only to the medical profession but also to educators and other allied health leaders.

2. "Foods in Oral Electrolyte Therapy"—designed primarily for the general practitioner who is concerned with electrolyte therapy in the non-hospitalized patient. Purpose of the display is to remind physicians that foods are useful in electrolyte replacement. The exhibit is divided into three major categories: (a) common clinical conditions causing deviation from the normal; (b) examples of foods useful for replacement therapy, and (c) advantages of oral administration of these elements.

HEALTH EXHIBIT GOOD DRAWING CARD

The first public showing of AMA's new health exhibit "We Hear" brought an enthusiastic response from visitors at the Florida State Fair in Tampa, January 29 through February 9. Most popular feature of the exhibit was the "test your hearing" booth which drew some 27,000 participants. Both the "We Hear" and "We See" exhibits were sponsored jointly by the Florida Medical Association and the Hillsborough County Medical Association. Other medical societies interested in showing health exhibits at local fairs should contact the AMA's Bureau of Exhibits as soon as possible. Many spring and summer bookings have already been arranged.

The most important single technique in brain tumor diagnosis is ophthalmoscopic examination, but before it or any other diagnostic procedure is undertaken suspicion of tumor must be planted in the physician's mind.

* * *

Only by employing adequate diagnostic measures can the offices of physicians and dentists become effective cancer detection centers.

* * *

In many cases of bladder tumor, symptoms of prostatitis and prostatic hypertrophy are frequently encountered.

* * *

Seminomas of the testes usually occur during the years of greatest sexual potency.

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response—avoids interruption of

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due to g.i. irritation

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poisoning from accidental overdosage

FERROLIP® *Flint* (Iron Choline Citrate*)

chelated iron for effectiveness
plus “built-in” tolerance and safety



for the clinical and
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complete literature

TABLETS—3 tablets supply 120 mg. of iron and 360 mg. of choline base. Adults: 1 or 2 tablets t.i.d.; Children, 1 tablet t.i.d.

SYRUP—6 teaspoonfuls supply 120 mg. of iron and 360 mg. of choline base. Adults: 2 to 4 teaspoonfuls t.i.d.; Children, 2 teaspoonfuls t.i.d.

DROPS—Each cc. provides 16 mg. of iron and 48 mg. of choline base. M.D.R. for infants and children up to 6 years is 0.5 cc.

Supplied: Tablets: Bottles of 100 and 1000; Syrup: Pints and gallons; Drops: 30-cc. dropper bottles.

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National Blue Shield Professional Relations Conference

"A strong Blue Shield is vital to the freedom of medical practice, and an understanding physician is vital to Blue Shield." This was the underlying theme of a highly successful "professional relations conference" held by the national association of Blue Shield Medical Care Plans in Chicago, February 11-13, 1957.

Some 110 Blue Shield professional relations directors and staff members were joined by more than seventy physician-trustees of local Blue Shield Plans and thirty-five executive secretaries of sponsoring county and state medical societies. The conference was conducted by the national Blue Shield Professional Relations Committee, whose Chairman is Dr. Fredrick H. Good of Denver, President of the Colorado Blue Shield Plan.

Keynoter of the conference was Dr. Robert L. Novy, of Detroit, national President of Blue Shield Medical Care Plans who emphasized that the ideals and purposes of Blue Shield are precisely the same as the age-old ideals and purposes of medicine: to serve people singlemindedly, regardless of personal profit.

"Blue Shield safeguards the basic freedoms of

medical practice which are fundamental to good medical care," Dr. Novy said. "Blue Shield hopes to strengthen the doctor's traditional way of practicing medicine, not to change it or destroy it. Blue Shield protects the patient's right to choose his doctor, the doctor's right to accept or reject the patient, and their common right to an inviolate confidential relationship."

Dr. Novy pointed out that in the fifteen years since Blue Shield was created, a whole new generation of doctors has come into practice who know nothing of the struggle and sacrifice of its founders. Many of these doctors take Blue Shield for granted, and the success of Blue Shield has even led many of their older colleagues to take it for granted, too.

Indifference, apathy and complaisancy can be fatal to Blue Shield and to the whole voluntary medical care prepayment program. "Blue Shield deserves the doctor's wholehearted support because it is fashioned in the doctor's own image; it is his own creation; and it is designed to strengthen the freedoms that he and his patients want to keep strong and safe," Dr. Novy concluded.

Joint Blood Council

Frank E. Wilson, M.D., Washington, D. C., executive vice president of Joint Blood Council, announced launching of a nationwide survey of blood transfusion services. The two-year study, made possible by a Public Health Service grant of \$50,000, will collect, analyze and disseminate information of vital importance in normal peacetime blood banking as well as in civil and military defense planning.

A census of the country's blood collection and distribution facilities will be only one phase of this survey, the most comprehensive in its field ever conducted. Among its objectives are preparation of guidelines and standards for accreditation of blood banks, development of a glossary of terms and solution of numerous nomenclature problems, inventory of research in blood and blood derivatives, and the assembling and analysis of needed data appertaining to these objectives.

Questionnaires and field sampling will be the principal media of the survey.

Dr. Wilson will serve as study director, with Mr. Paul T. Rees as associate director. The latter, a resident of Arlington, Va., was for nine years sales manager and director of trade relations for

a national pharmaceutical house following his retirement from the Navy. During World War II he was in charge of the materiel section of the Navy's whole blood program.

A national postal card survey, which is a preliminary screening for the main study, already is under way and the response has been excellent, said Dr. Wilson. In January nearly 10,000 cards were sent to hospitals, clinics and other institutions asking how many transfusions were given to patients. In each instance information was requested on sources of blood used—that is, whether it was obtained from Red Cross, a community blood collection agency, or some other facility, or whether or not procured by the using institution.

A project advisory committee of representatives from the Council's member institutions and research consultants will guide the survey.

Joint Blood Council, established in 1955 with headquarters in Washington, D. C., is a voluntary organization incorporated by five nonprofit agencies. These are American Medical Association, American Association of Blood Banks, American Hospital Association, American National Red Cross and American Society of Clinical Pathologists.

symptomatic relief... plus!

ACHROCIDIN^{*}

TETRACYCLINE-ANTIHISTAMINE-ANALGESIC COMPOUND

tablets and syrup

ACHROCIDIN provides early effective therapy for undifferentiated upper respiratory infections, especially in the very young and very aged; nephritics; susceptibles to recurrent middle ear and sinus infections; those with diabetes, chronic pulmonary diseases, bronchial asthma of the infectious type, rheumatoid or rheumatic disorders.

In addition to *rapid symptomatic improvement*, ACHROCIDIN offers *prompt, potent control of the bacterial component* frequently responsible for complications leading to prolonged disability in susceptible individuals.

Adult dosage for ACHROCIDIN Tablets and new, caffeine-free ACHROCIDIN Syrup is two tablets or teaspoonfuls of syrup three or four times daily. Dosage for children according to weight and age.

Available on prescription only

Each tablet contains:

ACHROMYCIN® Tetracycline	125 mg.
Phenacetin	120 mg.
Caffeine	30 mg.
Salicylamide	150 mg.
Chlorothen Citrate	25 mg.

^{*}Trademark

LEDERLE LABORATORIES DIVISION, AMERICAN CYANAMID COMPANY, PEARL RIVER, NEW YORK



Editorial Opinion

THE IDEAL PHYSICIAN

What makes "an ideal physician?" Dr. P. H. Woutat of Grand Forks, North Dakota, has provided his answer, and it's a compelling one.

The ideal physician, first, must be a man of top abilities, faultless personal habits, and the talent to inspire confidence and respect in others.

He must be active in community affairs of all kinds, and a frequent church goer.

He must be available to service, educational, religious and other groups which are seeking reliable information on medical subjects.

He must work on and contribute liberally to fund raising campaigns for hospitals, young peoples' organizations, homes for the aged, charities and other good works.

He must be active in local and state medical societies and must be faithful in attendance at hospital staff meetings, as a participant and educator.

He must be a good family man, "with a gracious and tactful wife who abhors mink coats and other vulgar extravagances . . ."

Finally Dr. Woutat says: "But above all this, he must never fail to give his patients the finest possible medical service, keeping abreast of medical progress by reading, attendance at medical meetings, and taking frequent postgraduate courses. He must be a tireless worker and improve his public relations by spending adequate time with his patients, answering urgent calls promptly, day or night, and by not keeping his patients waiting. This must all most certainly be done for what has been vaguely defined as a reasonable fee."

All over the country, thousands of doctors are doing a splendid job of living up to such high standards as these.—*Grandville Star & Alliance*, January 18, 1957.

HAVE YOU THOUGHT OF THIS?

This page has been used to protest certain practices indulged in by insurance companies. It should be a welcome change to commend a few of the many sound principles that have made their existence so necessary to all segments of our Society.

Our national economy has as an important cornerstone the tremendous investments of its citizens in insurance. The wage earner is attracted to life insurance as a means of current protection for himself and his family, and the anticipated future benefit of assured income in retirement. Means of current protection, aside from life insurance, are

hospital and health and accident policies. These facts are obvious, and there is no intent to repeat what every insurance agent can do much more thoroughly and competently.

The impact of compulsory health insurance upon this structure is a cause for real concern. It is not one that has been widely publicized. As an aside, the word "compulsory" is the only honest word in that phrase. It is not "health" but sickness,—as it is not "insurance" but taxes. The insurance principle is decidedly within the framework of our system of government. It helps our country and our country helps it. The adoption of an alien philosophy would lead to an inferior quality of patient care.

It would also seriously weaken the financial position of actuarial companies. This could bring about government control. Thus it is the patient and policyholder who will suffer. This is the reason our profession has fought this issue. Alas, there is a widespread opinion—in and out of the profession—that doctors oppose this type of legislation for the selfish motives of curtailed income and privilege. If this were true, we would be false to our heritage and singularly naive. Our system of government can only thrive on the principle of the greatest good to the greatest number. This adage was true at the dawn of our country; it is equally valid today. In the wide area of defense of democratic principle, the leaders of the medical profession and the leaders of the insurance profession are dedicated to a common goal.

—RALPH A. JOHNSON in *Detroit Medical News*

OPERATION ARMOR

(Continued from Page 434)

offices; and special "Immunization Days, or Weeks" were set aside, during which all applicants would get immediate consideration.

In other areas, such as in *Wexford, Missaukee* and *Saginaw* counties, M.D.-staffed clinics were set up in factories, schools and churches, operated on a mass basis.

In all cases, as reported above, the public response to Operation Armor has been phenomenal. There is every indication that close to 100 per cent "coverage" will be achieved by year-end as a result of this all-out drive. M.D.s and their patients are again proving the adage: "An ounce of prevention is worth a pound of cure."

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Cancer Registries

I. Purposes and Functions

By Harry M. Nelson, M.D. and E. R. Jennings, M.D.
Detroit, Michigan

INTEREST in the development of individual hospital cancer registries has been stimulated by the requirement of the American College of Surgeons that institutions, to meet the minimum standard for approval of a cancer program, must maintain a registry of all patients on whom a diagnosis of cancer is made.

In the manual published by the American College of Surgeons on such activities, the following appears:

"It shall be a requirement (after December 31, 1955) for approval that a properly functioning cancer registry be in operation which records every patient, private and public, inpatient and outpatient, upon whom a diagnosis of cancer is established. This may be the only formal cancer activity conducted.

"Each year a report will be made to the medical staff of the current work of the registry, including five-year end results as they become available through continuing follow-up."

This is an extension of the original requirements for an approved clinic (i.e., the consultative principle as related to the diagnosis and treatment of cancer) as carried out by the College during the past two decades. This addition makes it mandatory that the records of all cancer patients be reviewed periodically, from the standpoint of diagnosis, therapy and follow-up, by a committee of the medical staff of the hospital.

Dr. Nelson is Chairman of the Michigan Cancer Coordinating Committee.

Dr. Jennings is President-elect of the Michigan Pathological Society.

In 1956, the American College of Surgeons approved 713 cancer clinical facilities. This is an increase of fifteen programs over 1955 and has been achieved in spite of the mandatory requirement that an operating cancer registry has been a prerequisite for survey since January 1, 1956. Several large institutions in Michigan have conducted tumor registries and follow-up services for years. The purposes of these registries are to obtain information on the incidence and results of treatment on all cancer cases within the institution. Generally, these registries provide only the simple basic information which serves as a guide to find those cases on which detailed research is to be done.

The philosophy of the individual hospital registry as now required by the American College of Surgeons, is essentially that of a medical audit for cancer patients; i.e., it provides a tool for measuring the quantity and quality of medical care provided for cancer patients in a given institution.

The cancer registry is interested primarily in helping the patient who has cancer. It does this in several ways. First, it provides assistance for periodic follow-up examinations. Second, it makes possible the early detection of recurrent or metastatic disease which might have been missed or ignored. Third, it leads to the evaluation of results of treatment and in the end helps to determine the best method of cancer therapy.

By requiring accurate information about histologic diagnosis, clinical extent of the disease,

methods of treatment and other data, the cancer registry encourages better medical records. In simplest terms, it may be thought of as a mirror which reflects to the hospital staff what is good and what is bad with respect to the diagnosis and treatment of cancer in their institution.

Those institutions that have conducted cancer registries for years, and the many which started their registries recently, are already aware of its advantages and shortcomings. However, it provides only an appraisal of its own activities; i.e., a comparison with itself over a period of years.

The central registry, which provides for the pooling of records from a group of hospitals, permits not only evaluations within its participating institutions but also between these institutions. It is apparent from the experiences of several central registries now in operation that this type of evaluation is an important stimulus to the improvement of medical care for cancer patients. Without any hindrance or censure or undue condemnation, the central registry can simply file the facts as they prevail, hospital by hospital, and a mere distribution of these facts to the hospitals provides the stimulus for advancement in cancer control activities.

The primary purpose of a central registry is to serve as a foundation for the cancer control program of the geographic area covered by the participating hospitals. It is a basic tool for measuring the magnitude of the cancer problem and for evaluating the effectiveness of control measures. It is clear that only in such measure as the program approaches 100 per cent participation on the part of the hospitals in the area can it achieve its full value and purpose. The development of a system in which the cancer records from a group of participating hospitals are pooled in a central registry provides for more uniformity in reporting and operating procedures than would be possible if each hospital were to develop its own registry individually and independently. The quantity of material available for analysis will be such as to greatly enhance the value of the findings.

The basic objectives of a central registry are: (1) to provide a readily available source of consultative and supervisory assistance in the establishment and maintenance of the registries in the individual hospitals participating in the program; (2) to establish a clearing house and cross-reference file of information which will facilitate the follow-up of cancer patients in each of the par-

ticipating hospitals, and (3) to compile data and prepare analyses on an area-wide, as well as on an individual hospital, basis.

The central registry does not presume to take the place of or carry out any of the major responsibilities of the individual hospital registry. However, it can be a real asset to the successful functioning of a group of hospital registries. For example, the authority and responsibility for the development of a hospital registry rests with the Cancer Committee of that hospital. The experience of a small central registry staff, derived from assisting in the development of a number of hospital registries, is of value in the month-by-month maintenance and operation of such facilities. In the matter of follow-up, the individual hospital registry is responsible for maintaining contact with each of its patients. A central registry, however, can provide for each participating hospital a routine periodic list of cancer deaths, as well as information on other individual cases (received from various sources), thus facilitating the work of a follow-up in the individual hospital. If the central registry is developed to the point of including IBM equipment for the mechanical handling of mass data, it can prepare summaries not only of its total operation, but analyses of individual hospitals, that would be extremely time-consuming, if not entirely impossible, for the individual hospitals to undertake.

There are a few basic principles which should be considered in the development of a successful central registry program: (1) that it must have complete backing and active participation of all organized medical groups; (2) that it have the continuing counsel and guidance of a committee representing these groups for setting policy and ground rules on the responsibility and authority for the collection, maintenance, use, and final disposition of cumulative records, and (3) that the important work of a central registry should not be allowed to become snarled up in such tangles of the legal implications involved in reporting information.

The Michigan Cancer Coordinating Committee, which consists of six major groups primarily interested in the control of cancer, has endorsed the work of the American College of Surgeons Committee on Cancer Program in Hospitals. The organizations represented in the Coordinating Com-

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The Michigan Tumor Registry

An Historical Survey

Isidore Selzer, M.D.
Detroit, Michigan

WHILE the Michigan Tumor Registry was founded in 1949, its actual operation began in 1950. With a six-year-experience, it was felt that an historical review of the Registry's organization and a survey of its operations would prove of interest to the medical profession of Michigan and serve as a small contribution to the history of medicine in Michigan, especially as it relates to cancer control in this state.

The formation of a Tumor Registry in Michigan followed a pattern, which had already been established on both a state and national level.

With the development of state cancer control programs, the importance of having information concerning the incidence of cancer became readily apparent. It was in conjunction with the organization of its cancer control program in 1926 that Massachusetts became the first state to establish a tumor registry. Since then tumor registries have been developed as an adjunct to, or as a fundamental part of, the cancer control program in such states as Alabama, Connecticut, New York, New Jersey, Kentucky, Rhode Island, Washington, Pennsylvania and Utah.

Although all of these state tumor registries have in common, as one of their chief aims, some form of case-finding or case reporting, they nevertheless exhibit certain fundamental differences in their underlying philosophy, especially those pertaining to organization, method of operation and administrative control.

In Connecticut¹ and Massachusetts,² reporting of cases is carried out by hospitals and tumor clinics. The accumulated data is centralized in the state health department, division of cancer and other chronic diseases. This is encouraged in part by state aid to the hospitals and tumor clinics.

In Kentucky,³ Rhode Island⁴ and New York State⁵ (exclusive of New York City), data are accumulated by direct reporting of cases to the state health department by practicing physicians

and hospitals. In these states, reporting of cancer has been made mandatory by a legislative act (New York, Rhode Island), or state board of health regulation (Kentucky).

In 1939, the Pennsylvania Plan⁶ of the state department of health established a division of cancer control and declared tumors reportable diseases. Since mere reporting of the tumors was considered inadequate, it was decided to obtain, on a *voluntary basis*, clinical information as well as pathologic material concerning the tumors reported. It is this latter feature, i.e., the voluntary registration of tumor specimens and clinical histories, which made this plan unique, and it is this feature which has been followed in New Jersey,⁷ Alabama⁸ and Washington.⁹ The Pennsylvania Tumor Registry ceased to function in 1941.

In Utah,¹⁰ cancer was declared a reportable disease in 1947. However, due to the inadequate response to compulsory reporting, the Tumor Registry was organized in 1951 to undertake active case-finding through hospital and laboratory records and through data of the state health department statistics division. The Utah Tumor Registry also is no longer functioning.

On the national level, the registries which have developed are tissue, i.e., Pathology Registries, in contrast to the state registries which are concerned chiefly with case-finding and statistical analysis. The national registries, the first of which was formed in 1922, represent almost every branch of medicine and surgery. They are sponsored by national medical and professional organizations and are maintained at the Armed Forces Institute of Pathology. These registries are supervised by the American Registry of Pathology¹¹ which is a department of the Armed Forces Institute having liaison with the National Research Council and National Academy of Sciences.

The Michigan Tumor Registry follows that aspect of the Pennsylvania Plan dealing with the voluntary registration of tumor specimens, i.e., its policy is to collect and register specimens of tumor tissue and related clinical data submitted

Dr. Selzer is Director of the Michigan Tumor Registry.

voluntarily by the practicing pathologists in the state. Thus, it incorporates on a statewide level, some features of the national specialty registries. The organization is unique in that its support has come entirely from voluntary nongovernmental agencies. It is important to emphasize that the Michigan Tumor Registry is a tissue registry and that registration of cases is entirely voluntary.

The Michigan Tumor Registry was organized upon the initiative of the Michigan Pathological Society after a report to the Society by Dr. A. James French, Professor of Pathology at the University of Michigan Medical School, based upon information gained from his experiences as Consultant at the Army Institute of Pathology (now Armed Forces Institute of Pathology). In 1947, a committee was appointed by the president of the society to study existing state and national registries and to recommend a plan for a registry to be sponsored by the Michigan Pathological Society. Following a comprehensive survey by this committee under the direction of Dr. French, plans were presented to the Society for its consideration. The study and consideration of these plans extended over a period of nearly two years, following which the plans were approved and adopted by the Society.

In February, 1949, the Pathological Society, at the suggestion of its Tumor Registry Committee, voted to accept the invitation extended by Dr. William L. Simpson and Dr. William Murray, on behalf of the boards of trustees of the Detroit Institute of Cancer Research and the American Cancer Society, Southeastern Michigan Division, to locate the Registry in the Detroit Cancer Center. Since these two organizations as well as the Cancer Control Center (now Yates Memorial Clinic) were also located in the Cancer Center, this decision provided the Registry with office and laboratory space in the same building with its affiliated organizations and thus gained for the Registry the use of their facilities as well as the co-operation and guidance of Dr. Simpson, Scientific Director of the Cancer Research Institute, and Mr. Edward L. Tuescher, Executive Director of the American Cancer Society, Southeastern Michigan Division. At the same time the Registry has been able to reciprocate by co-operating in some of the work of the other agencies.

In June, 1949, the Michigan Cancer Foundation approved an appropriation of \$10,000 for the

establishment and first year's operation of the Tumor Registry. These funds were made available with the approval of the Cancer Control Committee of the Michigan State Medical Society.

The organization, administration, aims and purposes of the Tumor Registry were outlined in a plan which was drawn up and titled "Method of Organization." This document has since acted both as a charter and a constitution.

The following organizations were listed as sponsors: (a) Michigan Pathological Society; (b) Detroit Institute of Cancer Research; (c) Michigan State Medical Society, through its Cancer Control Committee; (d) American Cancer Society, Southeastern Michigan Division; and (e) Michigan Cancer Foundation.

The responsibility for the administration of the Registry was placed in the hands of an administrative committee which was constituted as follows: (a) Four members of the Michigan Pathological Society; (b) the Scientific Director of the Detroit Institute of Cancer Research; (c) the Executive Director of the American Cancer Society, Southeastern Michigan Division; and (d) one member of the Cancer Control Committee of the Michigan State Medical Society.

The purposes of the Tumor Registry may be summarized as follows:

- I. General
 - a. To maintain a tumor registry composed of microscopic sections submitted on a voluntary basis by Michigan pathologists and augmented by clinical and follow-up data.
- II. Educational
 - a. To supply pathologic material for professional education at all levels.
 - b. To assist pathologists in stimulating interest in cancer among the medical profession.
 - c. To supply pertinent data for lay education.
 - d. To evaluate present day diagnosis and techniques in tissue pathology in terms of earlier diagnosis.
 - e. To implement research.
- III. Statistical
 - a. To collect and interpret data regarding incidence, prevalence and mortality rates of cancer by site, pathologic type, age, sex, occupation and other pertinent variables.
- IV. Follow-Up
 - a. To assist and encourage the physician through the local pathologists to follow cancer cases.
- V. Tumor Consultant Board
 - a. This board is appointed by the Administrative Committee and carries the responsibility of reviewing sections of all controversial cases as submitted by the Director of the Tumor

Registry. Although the Registry was not and is not intended to be a diagnostic service, pathologists are encouraged to submit problem cases for consultation.

Considerable credit is due to the sponsoring organizations and especially their representatives to the Administrative Committee, all of whom serve voluntarily and who give freely of their time and energy to this project. A special debt of gratitude is owed to the late Dr. Donald C. Beaver; Dr. Osborne A. Brines, Chairman, Department of Pathology, Wayne State University College of Medicine; Dr. A. James French; and Dr. Frank W. Hartman, Emeritus Pathologist-in-Chief, Henry Ford Hospital, for their guiding interest in the organization and operation of the Michigan Tumor Registry.

At this point it would be appropriate to name the members of the first Administrative Committee, which held its initial meeting on November 30, 1949. At the time of this first meeting the Administrative Committee consisted of the late Dr. Donald C. Beaver, Chairman; Dr. Osborne A. Brines, Dr. A. James French, Dr. Frank W. Hartman and Dr. William L. Simpson. In the following year the Committee was completed by the appointment of Dr. Harry M. Nelson, Detroit, Chairman, Southeastern Michigan Division of the American Cancer Society, to represent this organization and of the late Dr. A. B. McGraw to represent the Cancer Control Committee of the Michigan State Medical Society.

Dr. Harry M. Nelson was replaced late in 1950 by Dr. John Locke as representative of the American Cancer Society, Southeastern Michigan Division. The latter was in turn replaced by Mr. Edward W. Tuescher, who became Executive Secretary of the American Cancer Society, Southeastern Michigan Division, in the latter part of 1951, and who has been a member of the Committee since that date. Dr. McGraw remained a member of the Committee until his death in 1953, and in 1954 Dr. John Wellman of Lansing was designated by the Michigan Cancer Co-ordinating Committee to fill the vacancy created by the death of Dr. McGraw. Dr. Wellman was a member of the Committee for approximately one year when pressure of other duties forced him to resign. Following his resignation in 1955, Dr. Harry Nelson was

designated as representative of the Cancer Co-ordinating Committee to the Administrative Committee of the Tumor Registry.

Of the pathologist members of the original Committee, Dr. French served until the end of 1950, Dr. Beaver through 1951, Dr. Brines through 1952, and Dr. Hartman through 1953. Beginning with 1951, the Michigan Pathological Society has each year designated a new member to represent the Society on the Committee. This member serves for a term of four years, and becomes the chairman of the Committee during the fourth year of his term.

Since this rotation began, Dr. Arthur A. Humphrey, Battle Creek, Drs. Donald H. Kaump, Lawrence W. Gardner and William L. Brosius, all of Detroit, Dr. R. E. Olsen of Pontiac and Dr. Viola Brekke, Highland Park, have been elected to the Administrative Committee. Dr. Humphrey completed his four-year term in December, 1954, and Dr. Kaump at the end of 1955. Dr. Gardner completed his term in December of 1956.

Dr. Simpson was the first secretary of the Administrative Committee. In 1951, Mr. Locke served a term as secretary, and since 1952 Dr. Simpson has been re-elected to this office each year.

After the Administrative Committee was organized its first official act was to utilize the funds allocated by the Michigan Cancer Foundation for the purchase of equipment and supplies for the Registry laboratory and office, space for which had been provided on the first floor of the Cancer Center at 4811 John R Street in Detroit. News releases were issued and the announcement was made that the Registry was officially opened.

About mid-year in 1950 tumor specimens began to be submitted to the Registry by various pathologists. After being processed in the Registry laboratory, these cases were reviewed and classified by the pathologist members of the Administrative Committee. It was not until early in 1951 when Dr. Henry Tesluk was appointed Director of the Tumor Registry that the Administrative Committee was relieved of the many routine duties which its members had voluntarily taken upon themselves.

In 1952, Dr. Tesluk resigned as Director, and it was not until 1954 when the author assumed

the post that the Registry again had a full-time director.

In the year 1950, only 280 specimens were received and recorded by the Tumor Registry. This

TABLE I. NUMBER OF ACCESSIONS TO
MICHIGAN TUMOR REGISTRY

1950	1951	1952	1953	1954	1955	Total
280	495	1192	782	1301	2021	6071

is shown in Table I, which also includes the number of accessions for each of the following five years. The decrease in the number of accessions for the year 1953 is undoubtedly due to the fact that the Registry was then operating with only a part-time director brought about by the resignation of Dr. Tesluk. In 1954, this downward trend was reversed and the number of new cases has increased each year.

The hospitals participating in the Registry program and the number of accessions credited to each hospital for the years 1950-1955 are listed in Table II. This table points up the fact that not only are all sections of the state represented to some degree, but also that certain hospitals, notably some in Detroit, are conspicuously absent. This latter fact, of course, tends to diminish the value of our statistics.

Since a complete analysis of the Registry material does not fall within the scope of this paper, only a partial classification of this material is included in Table III.

In addition to its main function of collecting, classifying and coding tumor specimens, the Registry has conducted other activities:

1. Provision of a consultation service for unusual controversial cases.
2. Preparation of histologic sections for the Slide Seminars of the Michigan Pathological Society.
3. Processing of biopsy specimens for the Yates Memorial Clinic (Cancer Detection Clinic of the American Cancer Society, Southeastern Michigan Division)
4. Participation in the research program of the Detroit Institute of Cancer Research.
5. Co-operation with American Cancer Society, Southeastern Michigan Division, in lay and professional education.
6. Co-operation with the American Cancer Society in its Smoking-Lung Cancer Survey.
7. Co-operation with the American Cancer Society, Southeastern Michigan Division, in encouraging and assisting the formation of hospital cancer registries.

TABLE II. ACCESSIONS TO MICHIGAN TUMOR
REGISTRY BY HOSPITALS

Location	Hospital	1950-1955
Detroit and Wayne County	Alexander Blain	27
	Children's Hospital	2
	Dearborn Veteran's Hospital	119
	Detroit Memorial	393
	Grace Hospital	2
	Harper Hospital	10
	Henry Ford Hospital	1200
	Herman Kiefer	2
	Highland Park General	59
	Mt. Carmel Mercy	706
	Providence	97
	Receiving	715
	Wayne County General	268
	Woman's Hospital	545
	Sinai Hospital	119
	Yates Memorial Clinic	65
	St. Joseph's Mercy	73
	Leila Y. Post Montgomery	204
Ann Arbor	Community	108
Battle Creek	Mersey and General	333
Bay City	Hurley	110
	McLaren	115
Flint	St. Joseph's Hospital	11
	Women's Hospital	10
Grand Rapids	Blodgett Memorial	169
	Butterworth Hospital	172
Jackson	St. Mary's Hospital	16
	Footo Memorial	10
Kalamazoo	Mersey	7
	Borgess	1
Lansing	Bronsen	77
	Edward W. Sparrow	2
Marquette	St. Lawrence	12
	St. Luke's	49
Muskegon	Hackley	1
	Mersey	63
Pontiac	Pontiac General	164
Saginaw	Saginaw General	23
Ypsilanti	Beyer Memorial	12
Miscellaneous		
Total		6071

Except for 1953, due to the reasons mentioned above, the Registry has shown continued growth in respect to the number of specimens submitted for registration. This fact is an indication of the growing awareness on the part of the pathologists of the importance of the Tumor Registry. However, in order to fulfill its purposes, the Registry is attempting to achieve its goal of a minimum of 3,000 specimens annually for the next several years. Although most hospitals and pathologists are co-operating to some extent in this effort, the Registry is hampered by the fact that some hospitals still are remaining aloof and unco-operative. Although pathologists are most directly involved with the activities of the Registry, its success is of direct or indirect concern to all members of the medical profession in Michigan and of course to their patients.

In addition to our continued efforts to encourage registration of increasing numbers of cases, our plans call for the preparation of adequate varieties of slide study sets to be available for loan purposes. We are also encouraging the use of our permanent slide collection for study and reference purposes.

At the present time, specialty registries within the Michigan Tumor Registry are being formulated with the co-operation of various specialty groups in the State of Michigan.

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TABLE III. CLASSIFICATION OF ACCESSIONS TO MICHIGAN TUMOR REGISTRY BY ORGAN SITE OR SYSTEM AND SEX FOR THE PERIOD 1950-1955

Primary Site	Male	Female	Sex Not Stated	Total M/F
Mouth and Oropharynx	142	36	1	179
Esophagus	67	14		81
Stomach	214	87		301
Intestinal Tract	455	374		829
Pancreas	38	23		61
Liver, Gallbladder and Bile Ducts	33	49		82
Nose, Larynx, Trachea and Lung	338	56		394
Urinary Tract	237	103		340
Male Reproductive System	316			316
Female Reproductive System		829		829
Breast	7	704		711
Skin	286	238	3	527
Brain and Spinal Cord	97	74		171
Bone	73	71		144
Thyroid	24	127		151
Lymphatic and Hematopoietic Systems	166	86		252
Salivary Glands	77	74		151
Soft Tissue	46	45		91
Miscellaneous Sites (Spleen, Adrenal, Eye, etc.)	37	38		75
Primary Site Unknown	94	50	1	145
Total Neoplasms	2747	3078	5	5830
Non-neoplastic lesions, errors, etc				252
				6082*

*The apparent discrepancy between the total figures of Tables I and III is due to the fact that in some cases, the same accession number included more than one neoplasm.

A constantly growing reprint collection dealing chiefly with the morphologic aspects of cancer, and selected texts and cancer journals are available for reference.

In addition, in accordance with the stated Registry program, follow-up studies on selected groups of cases are now being undertaken.

Although the Registry was initiated by the Michigan Pathological Society and members of this Society provide the chief basis for its scientific endeavors, the support and co-operation of members of all branches of medicine in Michigan would be welcomed. In turn, the facilities of the Registry are available to all members of the medical profession in Michigan.

Acknowledgment

Dr. Lawrence W. Gardner, President of the Michigan Pathological Society, has kindly reviewed the manuscript and has offered valuable criticism and suggestions.

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Cancer and Anoxia

A Further Evaluation of Clinical and Experimental Trends

By Edgar A. Bicknell, M.D., Detroit, Michigan

IN 1950 I advanced a new theory for the cause of cancer (JOURNAL MSMS, 49:1179-1184, 1950), namely, anoxia of a cell, goading it into cancerous change, by diverse actions, such as the carcinogens and their ilk on the one side, and cell factors on the other. Enzymes were suggested as possible agents. Reversion of the cell to a former, more primitive, type of metabolism requiring less oxygen, which allowed it to escape from physiologic control, I believed was cancer.

Last fall I decided to try once again to clarify this issue. There seems to me to be proof enough for all but the *modus operandi*. I knew of Otto Warburg's work on the excess lactic acid in cancer cells, but his recent report in *Science* (123:3191, Feb. 24, 1956), caused me to rewrite my paper to incorporate his theory. He lists the following sequence:

1. Injury to cellular respiration by interference with the oxygen supply.
2. Attempts of the cell to survive by shifting to anaerobic fermentation as an alternate source of energy.
3. Development of a transitional or sleeping phase, a precancerous state whose cells look like cancer but have not yet fully replaced respiration by fermentation.
4. Loss of cellular differentiation upon repeated substitution of respiration by fermentation. Subsequently these cells grow wild as cancer. This action parallels that of *Torula* yeast cells. Not even they can maintain structure permanently by fermentation alone without degeneration. Since these respiratory insults are irreversible, their effect is cumulative. Massive effect kills. Lesser amounts lead to cancer.

All other supposed causes of cancer are secondary and Warburg feels that stress on virus, chemotherapy and other research is futile and hinders the outlook.

I agree most heartily with the basic premises

because this is further proof of my theory, although we differ on some points. Precancer cells can revert to normal if the carcinogenic agent is removed. Also, I will show that cancer cells, though they seem to be growing entirely wild, may be under the influence of growth stimuli as well as hormone influence which, if enough energy is made available through glycolysis, may allow the cell to resume lost patterns of form and work. Energy not used for growth and reproduction can be shunted to the latter effects.

What is the opinion of others? Many, like Ludwig Gross, indict the virus as the cause of cancer. I knew Dr. Gross while in the service and respect his work very much, but I believe that though he has shown evidence in leukemia as well as in breast cancer, his virus theory applies to animals only and the viruses may be only co-carcinogens. The work of training viruses to attack cancer, while ingenious, I fear is a will-o-the-wisp. Cancer is so protean in its manifestations, due to the variety of tissue from which it springs, that this and a single magic bullet are doomed by the great variety of malignancies.

Heredity is the other main cause offered. A recent case report by Lt. Commander Ende in *Cancer* (Sept.-Oct., 1955), makes both heredity and virus as "*the*" cause of cancer untenable. He reported the delivery of identical twin girls at the thirty-second week of gestation to a healthy twenty-four-year-old primigravida. The one child was normal and stayed so through thirteen months. The other was stillborn, death being due to a large brain tumor, a medullo blastoma and ependymoma. Anoxia by cord torsion or compression is tenable. Transplacental carcinogenic activity can occur through hormones or other agents. We know that the placental barrier is far from complete. I know of no other theory than mine that can explain this.

In order to evaluate the whole field of clinical and research I have read much current literature

and delved into the basic sciences to strengthen my background in biology, genetics, biochemistry, enzymes, physics (especially isotopes and other radiation) as far as possible. My present evaluation follows.

Chronic lack of oxygen causes cancer. Cell resistance to carcinogenic activity varies. When cells are normal greater amounts of carcinogens are required. Even a normal cell can become cancer if enough carcinogenic activity is exerted on it. Depleted cells require far less. Especially if forced to work by nerve or hormone stimulation. How is this brought about? Many things have been shown to be carcinogenic. We know that ionizing radiation causes cell changes in the chromosomes and that mutations occur. We also know that malignancy follows many types of radiation. It can follow repeated small doses or one blast from atomic energy. Ultra violet light can be trained on portions of chromosomes and one can watch microscopically the definite changes which occur. Further study is being carried on by R. E. Zirkle. Cells in growing bone are more sensitive than in resting. Reserve cells in mitosis are the ones most affected. End cells never become cancerous, but may end up as giant cells.

Where is the action on the cell of radiation and other carcinogens? This is the "toughie." Even though radiation effects are visible and aromatic hydrocarbon carcinogenicity may not be, the latter seems to be the best carcinogen, displacing thorotrast. Jacob Furth and John L. Tullis have a masterful article in *Cancer Research* (January, 1956) on "Carcinogenesis by Radioactive Substances," that all should read.

The work of the Pullmans on electronic structure and carcinogenic activity of aromatic molecules is very trite. They have devised a method for measuring the molecular orbit of these substances, and show that there are static and active molecules present in these hydrocarbons. In order to be carcinogenic they must have an active K region, and if there is also an L region it must be somewhat inactive. A region is an assembly of two carbon atoms placed in such a way that they may undergo an additional reaction. A reaction center is a single reactive carbon atom particularly able to undergo a substitution reaction. Nagata and co-workers tried to elaborate on this by a so-called "frontier electron method," but the Pullmans have shown error in their interpretation. These hot areas on the cells are measurable and

show the degree of carcinogenic activity expected. I believe the Pullmans' work will be productive in solving the final link in interference with the cells' oxygen. Men like Pullman, Warburg or Theorell should be able to solve this.

I believe these hot atoms act like radiation in their effect on the cell but seem to require less time to cause the same end result. Drs. E. J. Ambrose, A. M. James and J. H. B. Lowick of London just reported in *Nature* that cancer cells have about twice the electric charge of normal cells. Work with bacteria has shown how easy it is to produce changes that can be handed on for generations. Growing organisms resistant to an antibiotic with sensitive ones in culture has caused the latter to become resistant for several generations. Likewise, bacteria grown in culture with enzymes and glucose have changes that are different if the glucose is added later. The descendants perpetuate this for plus or minus twenty generations. When the difference in the time of adding the glucose is so impressed on the cell, how easy it must be for lack of so vital an element as oxygen to cause changes in cells that last for generations and finally forever. Fibroblasts grown in culture in partial anoxia from a nitrogen atmosphere change to sarcoma. This should be a fertile field for research.

The enormous desoxy ribonucleic acid molecule is made up of large numbers of purine and pyrimidine bases and pentoses linked in long chains by phosphates. Our hereditary traits are determined by the exact structure of this molecule. Its size and complexity allows infinite genetic possibilities. The cell also contains RNA in the nucleolus, the mitochondria, and the smaller particles of the cytoplasm. The genes are made of DNA. Viruses and bacteriophages also are DNA in animal and some vegetable species. These are the only subcellular substances that can reproduce. This is why virus study is so intriguing. The DNA controls the cell and most workers think that it controls the making of RNA. Some think that RNA, like DNA, is self-perpetuating; at any rate, it is agreed that the DNA controls cell type and functions, while RNA controls enzyme formation. The importance of this in cancer is readily seen. Anything that injured either the DNA or the RNA could interfere with enzymes or with respiration of the cell causing anoxia. This is what causes cancer. Injury to respiration short of permanent is precancer. I believe removing the car-

cinogenic influence will reverse this, but after the cell has turned cancerous it cannot be reversed. Warburg feels, and so do I, that this is a case of survival of the fittest; that is, cells most able to turn to fermentation for energy when deprived of oxygen survive. Finally, after continual goading by anoxia, often produced by carcinogens, we get cells able to produce a large share of their energy aerobically, i.e., by fermentation. These cells are cancer. Warburg has shown that they may produce half of their energy this way, while a normal cell produces only about one per cent by fermentation and 99 per cent by respiration, that is, aerobically. Some of the effects may be due to changes in the cell membrane itself.

The use of hypotonic solutions has caused great spreading of the chromosomes so they can be counted under the microscope. Cancer cells show a very high number of these and fragments of shattered ones. This points to changes in the DNA. The fact that many carcinogens have been proved mutagens also fits. Many are known to depolymerize DNA. The fact that ontogeny tends to recapitulate phylogeny may account for the ability of some of the cells to reactivate fermentation processes. Maybe this was indelibly, if faintly, etched on the DNA as a gift from a remote ancestor. The ones who survive in this new form show how great an influence self-preservation can exert and also that the fittest survive. This new cell being forced to get its energy the hard way has to give up some of its former activities in order to survive. The degree of change ranges from grade 1 where there is little, to grade 4 where there is such great change that the former identity may be lost. The fact that grade 4 cancers of this type, when grown in a guinea pig's eye, may change enough to be identified is very significant. I believe this is due to the fact that the cancer cell still responds to certain stimuli. I think that the cell is removed from an influence that has been goading it into rapid growth and reproduction. When this is missing in the new locale, energy that was lacking is now available for use in restoring some of its former characteristics. I will elaborate on this further in regard to thyroid cancer. Research men with this lead may unravel this mystery.

The new micro techniques of dissection may aid in finding changes in structure before and after this change. Also it should be easy to see

what effect traces of carcinogens or hormones or both may have on this phenomenon.

There are several types of cancer:

1. Mucosal or skin epitheliomas.
2. Simple sarcomas of any tissue.
3. Simple adenocarcinoma of a sweat gland or any mucous gland.
4. Central nervous system tumors.
5. Respiratory tumors.
6. Urinary tumors.
7. Bone marrow, lymph and reticuloendothelial tumors.
(All of the above are simple, being under the influence of no known substance but the nervous system and any carcinogenic influence present.)
8. The endocrine tumors are under the influence of the pituitary except it, itself, which is influenced by the hypothalamus.
9. Sex tissues, less the gonads, are under the influence of the gonads and the pituitary and, also at times, the adrenals.

It is obvious that there are many forms of cancer under varying influences. It is hard to see how any one test can be devised for cancer *per se*.

There are many important factors in cell resistance to carcinogens.

Heredity. Some protoplasm must excel genetically.

Environment. Heat, cold, weather, sunlight and trauma with its edema are obvious factors.

Diet. Deficiency, especially of protein or vitamins; excess, especially of fat.

Blood supply, if impaired.

Nervous or tension states. May jangle our endocrines.

Aging—in many ways.

Many agents exert carcinogenic influences. These may be co-carcinogens or real carcinogens; they are often associated and additive. Among the most important are:

Radiation—X-rays, radium, radium water, radium chloride, thorotrast, ultraviolet, isotopes and other atomic energy.

Metals—arsenic, cobalt, chromium, to list a few.

Hydrocarbons—in vapor or fumes from chemicals; combustion gasoline and oils, raw or burned; factories; furnaces; cleaning fluids; paint solvent and tar roads.

Foods and chemicals ingested, absorbed from surfaces or injected accidentally or deliberately.

Aniline dyes. Even foods may contain them.

Water may be polluted by industrial wastes.

Tobacco, especially cigarette smoking.

Viruses, possibly.

Bacterial toxins, possibly.

Liver disease may accent the titre of some of these by failure to detoxify them normally. Tissue repair *per se* has been accused, but the small gut and the cornea where this is greatest rarely are malignant. Experimentally, most cancers have been produced in animals. Cancer of the colon has been produced by feeding Y⁹¹ and 3-3' dihydroxybenzidine.

The clinical features of cancer described by great men of the past are not to be lightly regarded. Osler, Mackenzie and Sydenham were very accurate in their observations.

Nasopharyngeal cancer from radioactive materials has been known for years. The effect of heat and tobacco in oral and esophageal cases is important. The stomach and pancreas are often affected by food and drink so seasoned and so hot that no animal could be induced to touch it. Lung bronchiogenic cancer has been elucidated so well by Ochsner that I wonder that any one still smokes. His statistics are so dramatic that it amazes me that some doctors make light of them. The recent showing of epithelial metaplasia of bronchial mucosa in smokers at postmortem and by biopsy which reverted to normal on discontinuation of smoking should convince any but those so blind they will not see. I believe tobacco may have a dual role in lung cancer. The nicotine may produce a vasospasm of the vessels supplying the bronchial mucosa. This, plus the known carcinogens, may be why it is so deadly. New work indicts a neutral fraction of the tars which the manufacturers are trying to eliminate.

The story of the pituitary and the thyroid are very illustrative. The pituitary makes trophic hormones for all the endocrines as well as the somatrophic hormone. This latter is a factor in goading cancers to grow and should be checked. The thyroid having a good hormone easily used in treatment, as well as I¹³¹, is perfect to show some aspects of cancer not formerly stated.

The normal gland and cancer, plus its metastases, pick up I¹³¹ if the latter are not too wild. When the level of thyroid hormone falls, TSH is made by the pituitary. Crile showed recently in the *Cleveland Clinic Quarterly* that lung metastases regressed when thyroid extract was fed in

large doses, probably due to suppression of the TSH. Lung metastases too wild to pick up the isotope have regained this ability after total thyroidectomy and have thus destroyed themselves. One explanation for this is that when all other thyroid was gone, the pituitary kept making more TSH and when the titre was high enough stopped growing and reproducing. Energy so liberated was used to return the cell enough towards its former state that it recovered the ability to pick up the iodine. Absence of the thyroid hormone eased the cancer cells as lack of sex hormone allows regression in cancer of the prostate. After total thyroidectomy, thyroid extract should be given, if not contraindicated, or the pituitary will get tumorous from overwork.

Breast and prostate cancers that regress with the opposite hormones are somewhat similar. In this case, I think that either hormone suppresses the gonadotropic hormones in either sex. I don't think the pituitary distinguishes between them. I believe that this suppression of the pituitary removes the drive from the gonads and hence no sex hormones are formed and this lack is what allows them to regress. This is similar, I believe, to what happens in the guinea pig's eye. There could, of course, be other factors in the latter because it is a transfer to a different species. I prefer to think they are the same. Tissue from breast or prostate cancer, if analyzed before and after this therapy, might show a down-grading of these tumors, too. The adrenal takes over sometimes in these cases and upsets the balance. Adrenalectomy has been done as has hypophysectomy. I believe that hormone therapy may make surgery unnecessary in some cases. Some of the effects from cortisone may be from adrenal suppression, predisone or prednisolone should be as efficacious and less troublesome.

The fact that thyroid extract in large doses was used empirically for ovarian dysfunction with fair success may be due to a cross-over suppression from contiguous areas of the gland. I am using this along with stilbestrol and Meticorten in an eighty-four-year-old man who relapsed after 9 years' control on stilbestrol alone. The tumor almost disappeared in the first instance. Using this pattern, any endocrine-fed tumor can be treated. The pituitary is affected by the emotions through the hypothalamus.

Because of the importance of early diagnosis we must alert the public still further. If cancer is

found early many can be completely removed and cured.

I find our pure scientists more interested in the unknown minutiae than in trying to foster use of the present material. I believe with Warburg that we have all but one or two pieces of the jigsaw puzzle. What we learn from now on may avail us little in cure. We should use the tremendous knowledge we have. Remember quinine and digitalis saved thousands of lives before much was known about them.

Prophylaxis is of the essence. The public should be educated by all available media in the importance of good living habits. Diet, rest, and vacations should be explained to all, starting with the tots. We should set examples, especially the doctors, by our lives and habits. I think all doctors should cease cigarette smoking even if they doubt the figures until they are proven one way or another. I am convinced now, as are many others. Moderation in everything from tobacco and alcohol to caffeine-containing drinks should be repeatedly stressed. All known carcinogenic influences should also be made known. Smoke and fumes should not be allowed to pollute our air, nor should anything else be put in our food and drink unless unavoidable. Government regulations should be strict because these are killers.

Chemotherapy has been helpful in a few isolated cases. We may get occasional results from the alkylating agents or the antimetabolites and hormones and isotopes in certain types. Dr. S. H. Jones of the Lahey Clinic has had some startling results with a NH_2 mustard regime not yet published. Because of the short wavelength of isotopes they must be localized like I^{131} to be effective. They help bone and body cavity cases best. Colloidal isotopes are trapped in the reticulo-endothelial cells.

I am sure our real gain is to be made in prevention. I feel so sure of this that I think that the great age of the biblical patriarchs may have been due to living as I have outlined in a world less teeming with carcinogens and tensions. Maybe their periodic fasts purged them of the

ones that were present. They stressed milk and honey. We want the fat of the land and are paying for this and other sins.

Metastatic cancer to the liver from the gastrointestinal tract is rapid and deadly. The rich portal blood feeds our livers better than any other organ. The cancer gets the same. Knowing the liver's great need for food, I started a patient on a diet deficient in protein hoping to reduce the body pool of building blocks for protein synthesis. If the cancer fails to get enough, it may fail to grow and stop reproducing. I hope that the high priority of the liver may let it out-compete the cancer for this scarce material. If the cancer stops growing, the liver may treat it as any other foreign substance and wrap it in fibroblasts till it is smothered in scar. This may also limit the intake of carcinogens. Also the endocrines may be suppressed. In addition, I suggest suppression of the endocrines empirically. The risk of stress in adrenal suppression must be understood and appropriate measures used when indicated.

Summary

A review of cancer has been attempted.

Anoxia as the cause has been stressed again.

The need to educate the public in all its aspects is urged.

Stricter regulation of all carcinogenic materials must be insisted upon.

More harm than good may come from radiation and hormone therapy if we are not vigilant. All anticarcinogenic agents are carcinogenic themselves, and may precipitate more cancer than they cure. We may be sowing the wind to reap a later hurricane. Every physician should realize the great latency as exemplified by bronchiogenic cancer from smoking. Hormones may give us a flood of gonadal cancer later if used promiscuously. There is evidence of this in increased fundal cancer of the uterus.

Acknowledgment

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Screening for Carcinoma of the Cervix

The Use of the Cytological Smear in Office Practice

By Norman D. Henderson, M.D., Lansing, Michigan;
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CANCER produced 16.6 per cent of all reported deaths in Michigan in 1954¹. Malignant neoplasms are the second most common cause of death in both sexes at all ages from one to sixty-four. After age sixty-five, deaths due to cancer are the third ranking cause of death in Michigan.

Gastrointestinal tract.....	24.5 per cent
Breast	19.3 per cent
Uterus	13.3 per cent
Leukemia	4.2 per cent
Respiratory tract.....	3.1 per cent
Skin	1.0 per cent
Buccal cavity and pharynx..	0.7 per cent
All other sites.....	33.9 per cent

TABLE I. DEATHS DUE TO CANCER OF THE UTERUS
IN MICHIGAN AND SAGINAW COUNTY SINCE 1940

Year	Michigan				Saginaw County			
	Total	Rate Per 100,000	Cervix*	Other Parts of Uterus	Total	Rate Per 100,000	Cervix*	Other Parts of Uterus
1940	660				11			
1941	657				18			
1942	643				15			
1943	675				12			
1944	705				16			
1945	704				16			
1946	710				21			
1947	695				25			
1948	685				14			
1949	653				20			
1950	594	9.3	316	278	9	5.9	3	6
1951	678	10.4	373	305	15	9.6	9	6
1952	631	9.4	334	297	18	11.3	8	10
1953	644	9.4	351	293	18	11.2	13	5
1954	621	8.9	358	263	15	**	11	4

*Deaths due to cancer of the cervix and 1 other unspecified parts of the uterus not available prior to 1950.
**Saginaw County population figures not available.

Prior to 1947, malignancies of the uterus were the most common cause of death from cancer in Michigan women, followed by cancer of the breast, intestines, stomach and duodenum, female genital organs other than the uterus, rectum, respiratory tract and skin. There have been several changes in the frequency of cause of death since 1947, due in part to the regrouping and reclassification of causes of death. Malignancies as a cause of death of Michigan women were reported in the following order in 1954:

This study was supported with cancer funds allotted to the Michigan Department of Health by the Department of Health, Education and Welfare, United States Public Health Service.
Dr. Henderson is from the Michigan Department of Health; Dr. Bucklin is Director of Laboratories, Saginaw General Hospital; Dr. Volk is Director, Saginaw County Health Department.

Table I is a summary of the deaths due to cancer of the uterus as reported in Michigan and Saginaw County since 1940.

Detection of carcinoma of the cervix in the early or pre-invasive stage has been greatly assisted by the inclusion of exfoliative cytology in the examination of the female pelvis. The simplicity of the method of collecting and fixing the smear lends itself well to use in the practitioner's office.

A co-operative study was undertaken by the Saginaw County Medical Society, the Michigan Department of Health*, and the Saginaw County Health Department. Publicity directed at the lay public was not attempted. The study was organized with three main objectives in mind.

*Division of Tuberculosis and Adult Health.

First, this survey was designed to gain information as to whether a screening technique of this nature could be included as a part of the cancer control program of the Michigan Department of

bered daily. They were then submitted in rotation to three Saginaw pathologists in groups of twelve cases. Two of the pathologists elected to stain the fixed smears with hematoxylin and

TABLE II. AGE, RACE AND ETHNIC GROUP DISTRIBUTION AND MARITAL STATUS PER 1000 PATIENTS EXAMINED IN THE SAGINAW COUNTY CERVICAL CANCER SURVEY

Age Groups	White				Negro				Mexican				Total
	S	M	W	D	S	M	W	D	S	M	W	D	
15-19		4				1							5
20-24	6	41		1	1	4		1					56
25-29	5	109		2		6							126
30-34	3	117				8			1			1	132
35-39	3	121	2	3		4		1					135
40-44	5	145	3	3		3	1						161
45-49	4	138	2	3		3		1					152
50-54	1	87	4	5		3	1						101
55-59	4	49	4	2		1							60
60-64	3	31	4	2									40
65-69	2	10	5										17
70-74		11	4										15
Total	36	863	28	21	1	33	2	3	1	10	0	2	1,000

S—Single M—Married W—Widowed D—Divorced

Health. Second, it was felt that a survey of this type would serve as a supplement to the program of physician education in cancer detection. Third, it was considered desirable to determine how successful a routine screening procedure was when carried out in several physicians' offices. The project was first discussed with the members of the Saginaw County Medical Society and its Committee on Cancer Research. Participating physicians were encouraged to make a smear from the cervix of female patients routinely seen in the office during the course of the survey.

This report deals with an attempt to conduct a survey of women for carcinoma of the cervix by using the cytological smear technique on a routine basis in the physician's office.

Methods and Materials

Prior to the start of the survey in February, 1955, kits were delivered to the office of each participating physician in Saginaw County. Each kit contained a six-ounce bottle of ether alcohol fixative, several glass slides, mailing containers, labels and sets of instructions for taking, fixing, and mailing the smears. A data form for information about each patient was required to be completed by the physician and returned with the fixed smear. Single specimens taken with a wooden spatula produced satisfactory specimens in the great majority of cases.

The smears were mailed to the local health department where they were recorded and num-

bered daily. They were then submitted in rotation to three Saginaw pathologists in groups of twelve cases. Two of the pathologists elected to stain the fixed smears with hematoxylin and

eosin, while the other used the staining technique of Papanicolaou. Each smear was examined by only one pathologist.

Each pathologist surveyed the stained smears without the use of preliminary screening personnel. Reports were made as follows:

"No tumor cells found"
 "Atypical cells found"
 "Cancer cells found"

The criteria of atypia and neoplasia accepted by cytologists in general were used. A discussion of these criteria is not within the scope of this paper.

Results

Thirty-five physicians in Saginaw County elected to participate in this study. Specimens were submitted as follows:

20 general practitioners.....	108 specimens
9 gynecologists	756 specimens
3 internists	37 specimens
Cancer Detection Center.....	99 specimens
Total	1,000 specimens

A total of 1,000 specimens was examined (Table II). Smears containing atypical cells were reported in fifty instances (Table III). No definite diagnoses of cancer were made from the smears, although in one instance, very highly suspicious cells were noted. The remaining 950

TABLE III. FINDINGS IN THE SAGINAW COUNTY CERVICAL CANCER SURVEY

February—July, 1955

Findings	Number
1. Patients examined	1,000
2. Patients found to have atypical cells by smear	50
3. Biopsies recommended	50
4. Patients on whom biopsy was performed	42
a. Cervical cancers found by biopsy	2
1. Previously unknown case	1
2. Previously known case	1
b. Squamous metaplasia found	10
c. Chronic cervicitis found	30
5. Patients found to have atypical smears but not biopsied	8
a. Patient did not return	2
b. Physician decided against biopsy	5
1. Physician saw no abnormality	2
2. Previous diagnosis of cancer of cervix	3
c. Patient refused biopsy	1

smears were reported as "No tumor cells found."

In each of the fifty instances where atypical cells were found, the physician who submitted the specimen was contacted and requested to obtain a biopsy of the suspected cervix. Table III shows the disposition of these fifty cases. The one proven case of carcinoma of the cervix may be summarized as follows:

Case 1. Smear No. 688—Sixty-one-year-old white woman, four pregnancies. No history of menstrual irregularities, cervical lesions or hormone therapy. Discovered during a routine physical examination.

Diagnosis: Squamous cell cervical carcinoma.

Smears from four previously known and treated cases of carcinoma of the cervix were submitted by physicians without the pathologists being aware of the diagnosis. In each case atypical cells were found. These four patients are not included as having been discovered as a result of this survey. In three of these cases, the attending physician decided that a biopsy was not indicated (Table III).

Discussion

The age and marital status of the surveyed group are given in Tables IV and V. Thirty-seven atypical smears (74 per cent) were found in the age group thirty-five to seventy-four, thirteen atypical smears (26 per cent) were found in the group less than thirty-five, while two atypical smears (4 per cent) were taken from women under twenty-five. However, 4.2 per cent of the women twenty-five to thirty-four, 5 per cent of the women thirty-five to forty-four, and 4.3 per cent of the women forty-five to fifty-four had atypical smears.

Married women, making up 90 per cent of the

TABLE IV. NUMBER OF ABNORMAL CASES FOUND PER 1000 PATIENTS EXAMINED IN THE SAGINAW COUNTY CERVICAL CANCER SURVEY BY AGE

Age Groups	Total Number of Smears Received	Number of Atypical Smears	Per Cent of Atypical Smears by Age Group	Per Cent of Atypical Smears by Age Group and in Relation to Total Abnormal Findings
15-24	61	2	3.2	4.0
25-34	258	11	4.2	22.0
35-44	296	15	5.0	30.0
45-54	253	11	4.3	22.0
55-64	100	10	10.0	20.0
65-74	32	1	3.1	2.0
Total	1,000	50	—	100.0

TABLE V. NUMBER OF ABNORMAL CASES FOUND PER 1000 PATIENTS EXAMINED IN THE SAGINAW COUNTY CERVICAL CANCER SURVEY BY MARITAL STATUS

Marital Status	Total Number of Smears Received	Number of Atypical Smears	Per Cent of Atypical Smears by Marital Status	Per Cent of Atypical Smears by Marital Status and in Relation to Total Abnormal Findings
Single	38	3	7.0	6.0
Married	906	42	4.6	84.0
Widowed	30	3	10.0	6.0
Divorced	26	2	7.6	4.0
Total	1,000	50	—	100.0

total, contributed 84 per cent of the atypical smears. Only 4.6 per cent of the married women had reportable smears, while 10 per cent of the widowed group had detectable atypical cells. Wynder² observed that abnormal cytological smears correlate better with the duration of sexual activity than with the number of pregnancies. Table II shows that the widows studied were all over age thirty-five. Table VI shows the relationship of atypical smears to the number of pregnancies is the surveyed group.

Table VII is a classification of the studied cases by racial or ethnic origin. White women, making up 94.8 per cent of the cases, had 90 per cent of the atypical smears while the negro and Mexican women (5.2 per cent of the cases) had 10 per cent of the reportable smears. Of 948 white women, 4.7 per cent had atypical smears, while thirty-nine negro women had 10.2 per cent. Mexican women had 7.7 per cent atypical smears. Wynder² reports a high rate of cervical cancer (not abnormal cervical smears as reported here) in U. S. negroes, and implies an association between the age at first coitus, circumcision and penile hygiene and the rate of cervical cancer in U. S. negroes.

TABLE VI.
NUMBER OF SMEARS SUBMITTED IN RELATIONSHIP
TO THE NUMBER OF PREGNANCIES IN THE
SAGINAW COUNTY CERVICAL
CANCER SURVEY
February—July, 1955

Number of Pregnancies*	Number of Smears	Number of Atypical Smears
0	138	5
1	135	9
2	267	7
3	186	12
4	123	8
5	63	4
6	40	2
7	18	
8	10	1
9	11	1
10	3	
11	1	
12	3	1
13	1	
14	0	
15	1	
Total	1,000	50

*There are on the average two and one-half pregnancies reported from married women in Michigan⁽¹⁾.

Of the fifty women found to have abnormal smears, only seven had menstrual irregularities. No information concerning menstrual abnormalities was submitted on one patient, while forty-two had normal menstrual cycles reported.

Lesions of the cervix were observed in eighteen patients while thirty women had no visualized lesions of the cervix. This information was incomplete on one woman. Only two of the fifty women with abnormal smears had received hormone therapy. Information was incomplete on two cases.

Summary

The results of a survey for carcinoma of the cervix, using the cytological smear technique, as done in private physicians' offices in Saginaw County, Michigan, are reported. One new case of cancer of the cervix was found as a result of this survey. Four cases of carcinoma of the cervix, each previously known to the physician submitting the specimen, were detected by this screening procedure. Some of the relationships between age, race, ethnic groups, marital status,

TABLE VII. NUMBER OF ABNORMAL CASES FOUND
PER 1000 PATIENTS EXAMINED IN THE
SAGINAW COUNTY CERVICAL CANCER
SURVEY BY RACE OR
ETHNIC GROUP

Race or Ethnic Group	Total Number of Smears Received	Number of Atypical Smears	Per Cent of Atypical Smears by Race or Ethnic Group	Per Cent of Atypical Smears by Race or Ethnic Group and in Relation to Total Abnormal Findings
White	948	45	4.7	90.0
Negro	39	4	10.2	8.0
Mexican	13	1	7.7	2.0
Total	1,000	50	—	100.0

number of pregnancies and the atypical smear are discussed.

It is our opinion that cytologic smear technique has a definite place in the practitioner's office and that the use of such facilities should be expanded. The ready availability of slides and fixative solution in the physician's office and the accessibility of a cytologist would serve to encourage such a practice.

The cytological method serves the valuable role of pointing suspicion to malignancy, encouraging close surveillance of the gynecologic patient with atypical epithelium, and providing an indication for repeated tissue evaluation.³

Acknowledgment

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MASS CASUALTY CONFERENCE

Monday and Tuesday, May 6-7, 1957, have been established for a two-day Mass Casualty Conference at Ann Arbor. The first day is to be devoted to activities on a national level, the second day to regional and local level planning.

There are now thirty-five medical schools affiliated

with the programs supported through the Department of Defense with a goal to increase the teaching of trauma in medical schools as related to national defense and, where possible, items are being added to the curriculum regarding trauma as related to national disaster.

Cobalt⁶⁰ Teletherapy in the Palliation of Advanced Gastrointestinal Carcinoma

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FORTY-FIVE patients with advanced gastrointestinal carcinoma have been treated by means of Cobalt⁶⁰ Teletherapy during the eighteen months that the unit has been in use at Detroit Memorial Hospital.

It has long been the opinion of radiotherapists that although adenocarcinomas of the gastrointestinal tract may present variable degrees of radiosensitivity, they are, in general, not radio-curable. However, the place of radiation in the palliation of advanced disease of this nature is well established. Unfortunately, irradiating the abdomen with the usual x-ray apparatus (200 to 250 kilovolts) often causes symptoms of a more severe nature than those for which the treatments are given.

The Cobalt⁶⁰ Teletherapy Unit provided a source of high energy radiation similar to a conventional x-ray machine operating at about 3 million volts. It was hoped that, using this unit, a sufficient depth dose could be delivered to produce considerable palliation without causing the patient undue distress due to the treatments. Two factors pointed favorably to this possibility: (1) The skin reactions with Cobalt⁶⁰ radiation are much less than with conventional x-rays. The maximum dose rate is found not at the skin, but at a level 4 mm. below the skin. The skin dose rate is even lower than the dose rate in tissues at a depth of 10 cm. (2) Since there is less lateral scatter of the primary Cobalt⁶⁰ beam, it is possible to deliver a given tumor dose with less irradiation of adjacent tissues. This permits a smaller volume (integral) dose than with radiation of lower energy. Radiation sickness is, to some extent, a function of volume dose.

Our earliest experience in the treatment of advanced gastrointestinal cancer encouraged the acceptance of additional cases of a nature often

rejected for treatment with conventional radiation. The first patient treated with the Detroit Memorial Hospital Cobalt⁶⁰ Unit was a man with an inoperable, anaplastic carcinoma of the head of

LOCATION	NO.	AVERAGE DOSE	NUMBER PALLIATED	RADIATION REACTIONS
Large Bowel	26	5000r/5 wks.	20	8
Stomach	9	5000r/6 wks.	5	4
Pancreas	6	5000r/6 wks.	2	1
Biliary	4	5000r/6 wks.	3	3
Total	45		30 ± 67%	16 ± 36%

Fig. 1. The entire group considered as to primary site of disease, usual depth dose delivered, total number palliated, and total number of radiation reactions.

the pancreas. He was accepted for treatment with considerable hesitation and doubt. However, following treatment, he improved subjectively as well as objectively, and had six months of asymptomatic, apparently normal life. Similar early experiences with carcinoma of the large intestine led us to be rather hesitant in rejecting patients because of massive disease.

The forty-five patients now being considered almost uniformly had massive local disease with or without regional and/or distant metastases. Many had lesions which were inoperable when first diagnosed. An even larger group had disease representing postoperative recurrence. Figure 1 demonstrates the distribution of cases as to location of the primary disease. It also indicates the usual dose rate used in the treatment of the various types. A fairly uniform dose schedule was used; in most instances a depth dose of 5000 gamma roentgens was delivered in a period of five to six weeks. Alterations were made in this schedule if necessary. These were determined by the patients' reactions to radiation and, occasionally, by the response noted in tumor mass. Thirty patients were, in our opinion, palliated to a greater or lesser extent. Sixteen patients experienced

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radiation reactions of some degree. No correlation was observed between palliation and radiation reactions. Figure 2 indicates the degree of palliation achieved in the different groups of patients and in the group as a whole. The group of

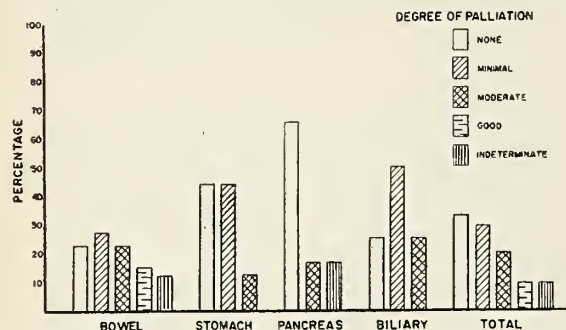


Fig. 2. The degree of palliation achieved in each group and in the group as a whole.

bowel cases is the only one large enough to be of any real significance considered percentagewise. It is seen that a total of 50 per cent of these patients received no or minimal palliation. In all, 38 per cent were palliated to a degree classified as moderate or good. The remaining 12 per cent were placed in an indeterminate group because of our inability to say that we had brought about any degree of palliation. This was due to the fact that these patients had no definite symptoms at the onset of therapy. They did, however, do better for longer periods of time following treatment than would be expected considering the extent of their disease. For that reason we have placed them in an indeterminate group—neither classifying them as palliated nor unpalliated. The symptom most commonly encountered in this and the other groups was pain. Figure 3 shows that 77 per cent of the bowel cases had pain as a presenting complaint. 75 per cent of these patients received some, frequently minimal, relief of pain following Cobalt⁶⁰ Teletherapy. Other complaints frequently encountered were weakness, anorexia, discharge, diarrhea, and general malaise.

Again examining Figure 2, it is noted that a total of 88 per cent of patients with carcinoma of the stomach received no or minimal relief following irradiation. However, even though no definite symptomatic relief was obtained, we feel that in this group obstruction was prevented in two cases and bleeding halted in one case. One patient has been classified as getting moderate palliation.

Marked improvement in sense of well-being occurred, and the patient survived six months, or twice as long as the average for the group, in spite of disease of the same type and extent as was present in most of these patients.

LARGE BOWEL CARCINOMA - 26 Cases	
Pain as a presenting symptom:	
20 cases =	77%
Relief of pain following CO ⁶⁰ :	
15 cases =	75%

Fig. 3. Per cent of patients palliated when pain was a primary complaint.

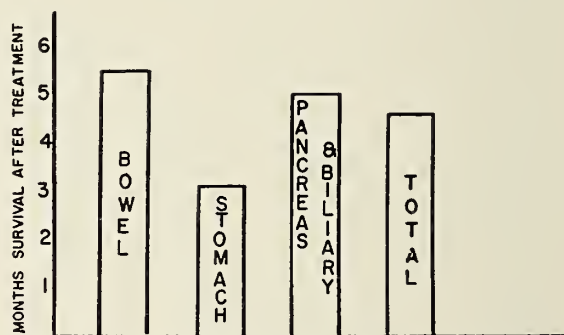


Fig. 4. Average survival time following irradiation.

We have treated only six patients with carcinoma of the pancreas and four with carcinoma of biliary tract origin. The value of roentgen therapy for advanced carcinoma of the pancreas was first demonstrated by Richards in 1922. Little has been written on the subject in recent years. We have had success in two of our six patients. One was our first patient as previously described, and the other our most recent case—a patient with very extensive local disease who completed therapy four months ago and continues to feel well and gain weight.

Improvement following irradiation was noted in three of the four patients with carcinoma of the biliary tract. However, two of these were palliated only minimally. The average duration of life in these two groups (Fig. 4) was five months following therapy. For patients with cancer of the bowel it was 5.5 months, stomach 3.1 months, and the average for the entire group was 4.6 months.

As was expected, the natural course of the disease was not altered and patients well palliated did not necessarily live longer than those getting no relief at all.

Sixty-two per cent of the entire group were

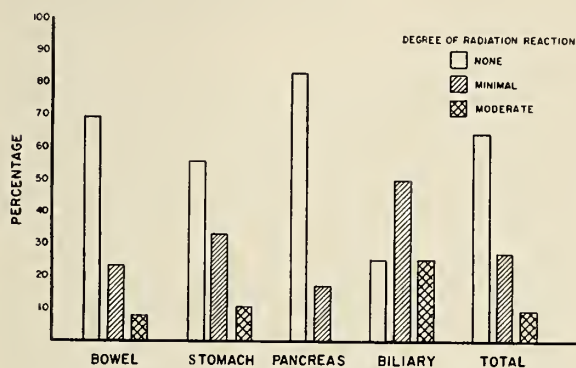


Fig. 5. The degree of radiation reactions occurring in each group and in the group as a whole. No severe reactions occurred.

palliated not at all or only minimally. Considering this, and the fact that average life duration following treatment was only 4.6 months, it becomes necessary to investigate the frequency and severity of radiation reactions. It would indeed be a sorry state if we were causing more distress with the therapy than we were relieving. An examination of Figure 5 reveals that radiation reactions were remarkable only in their absence, 91 per cent of patients experiencing no or minimal symptoms due to therapy. In no case was it necessary to discontinue treatments because of intolerance to irradiation. Only 9 per cent had reactions of moderate severity. These were usually well controlled by medication. In a few cases it was necessary to decrease the daily rate, temporarily, while reactions were brought under control.

Considering the entire group, it would be difficult to say, with assurance, that more than 29 per cent of these patients derived any definite benefit from irradiation. This figure excludes all cases classified as minimal palliation as well as those called indeterminate. It is our feeling, however, that many of these patients were not only significantly benefited but that complications were frequently prevented. Evaluation of minimal degrees of palliation was most difficult because of the lack of an adequate control group, and also, because of the marked psychological reaction some patients have to cobalt therapy. A more prolonged study

of a larger group of patients is needed for final evaluation of Cobalt⁶⁰ radiation as a means of palliation of advanced gastrointestinal carcinoma.

Case Reports

The following two case histories are presented as representative of the type of problems encountered.

A. W., a fifty-three-year-old white man was first seen at another hospital on June 15, 1954, with a chief complaint of abdominal pain and a history of dull pain in the right upper quadrant for four years. There had been a loss in weight of fifty-five pounds during the past two years. On June 16, 1954 a complete gastrointestinal series, cholecystogram and chest x-rays revealed normal findings. A second admission on June 29, 1954, resulted in cholecystectomy with a final diagnosis of cholecystitis and highly undifferentiated carcinoma of the pancreas which was deemed inoperable. The patient was sent to us for cobalt teletherapy. Following discharge from the hospital the patient continued to run a slight afternoon fever and complained of weakness. He again lost approximately ten to fifteen pounds in a three-week interval. An upper gastrointestinal series on July 20, 1954, revealed the entire descending limb of the duodenum to be markedly irregular in contour with complete destruction of mucosal pattern.

Cobalt therapy was started on July 21, 1954, and was directed through two anterior and two posterior 12 x 15 cm. fields angled medially to crossfire the pancreatic area. A tumor dose of 4400r was delivered in six weeks. The final treatment was given on August 31, 1954, and an upper gastro-intestinal series on September 28, 1954, revealed very marked improvement in the appearance of the pancreatic area and duodenum with decrease in size of mass and decrease in duodenal infiltration. At a point midway in the course of therapy, the patient became asymptomatic, developed a sense of general well-being and began to gain weight. He played nine holes of golf on his final treatment day. A chest roentgenogram taken December 8, 1954, revealed metastatic carcinoma involving the left lung. Pulmonary metastases advanced rapidly and the patient died on February 23, 1955. He was asymptomatic as far as his abdomen was concerned.

C. S., a thirty-eight-year-old white man was first seen April 16, 1954. He had a history of bloody stools for one week. Sigmoidoscopic examination revealed an adenocarcinoma 15 cm. from anus. Abdominal perineal resection of the rectosigmoid was done on April 22, 1954, for adenocarcinoma of the rectum extending into serosa with lymph node metastases. The postoperative course was uneventful, except the patient complained of perineal wound pain. A small mass appeared in this area and was deeply excised on July 15, 1954, and showed recurrent adenocarcinoma of rectum in the perineal wound. It was felt that this was incompletely removed

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Results of Surgical Management of Carcinoma of the Thyroid

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HOW EXTENSIVE should surgery be for thyroid carcinoma? This controversial question is especially applicable for the most common pathologic variety of thyroid carcinoma—papillary adenocarcinoma, and the answer to this question will come only from periodic, critical evaluation of the results of treatment.

The objective of this study was to evaluate the efficacy of the various surgical procedures done at Henry Ford Hospital from 1924 through 1951, and the data were correlated with the pathologic type of lesion. An attempt was then made to utilize this experience in arriving at a more effective and standardized plan of surgical treatment.

Material

Thirty-seven patients with malignancy of the thyroid were followed a minimum of three years or until death. The distribution of cases with regard to the pathology is shown in Table I.

Seventeen of these patients were followed from five to twenty-seven years, seven from three to five years and thirteen from operation to death, a period which ranged from the immediate post-operative period to twenty-one years.

The grouping of malignant thyroid lesions followed in this report is based on the pathologic classification used by Warren and Meissner.¹ In those instances where there were both papillary and follicular elements, the predominating cellular arrangement determined the classification of the neoplasm.

Group I. Papillary Adenocarcinoma.—Of the nineteen patients with papillary adenocarcinoma of the thyroid there were seven recurrences following the original surgery. Four of the patients with recurrence expired of the disease (Table II).

In this group the primary surgery consisted of

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eight subtotal lobectomies in which there were two recurrences; five total lobectomies with one recurrence. The nodule only was excised in five, with four recurrences. The fifth was deemed inoperable after biopsy. There were seven radical

TABLE I. DISTRIBUTION OF VARIETIES OF THYROID MALIGNANCY IN THIS STUDY

Type of Malignancy	No. of Patients
I. Papillary adenocarcinoma	19
Low grade	5
Papillary	14
II. Follicular adenocarcinoma	10
Low grade	1
Follicular	9
III. Undifferentiated carcinoma (all small cell)	5
IV. Miscellaneous	3
Small cell carcinoma	1
Malignant Hurthle cell with metastases	1
Reticulum cell carcinoma	1
Total number of patients	37

TABLE II. PAPILLARY ADENOCARCINOMA

Operation	No.	Recurrences
Subtotal	8	2
Total	5	1
Nodule only	5	4
Biopsy only	1	0
Total	19	7

Radical Neck Dissection Papillary Adenocarcinoma

	No.	Further Recurrence
Initial	3	0
After recurrence	4	1*
Total	7	1

*Distant metastases present at the time of neck dissection.

neck dissections in conjunction with either total or subtotal lobectomy. Three were at the time of the lobectomy with no recurrences; four were done after recurrence with one re-recurrence. The re-recurrence was not local and distant metastases were present at the time of the neck dissection. Thus, of the seven radical neck dissections done either at the time of original surgery or after recurrence, all are living without recurrence except the one patient who had a metastasis at the time of operation.

TABLE III. FOLLICULAR ADENOCARCINOMA

Operation	No.	Recurrences
Subtotal	4	2
Total	4	1
Nodule only	2	1
Total	10	4

Radical Neck Dissection

	No.	Recurrence
Initial*	2	1
After recurrence	0	0
Total	2	1

*Both had a nodule excised within the previous month.

Group II. Follicular Adenocarcinoma.—None of the ten patients with follicular adenocarcinoma had apparent extensive lesions when first seen. Four of these ten, however, developed recurrences following the original surgery for their neoplasm. One of the four patients experiencing recurrence died of his disease and another has an inoperable re-recurrence (Table III). Initial surgery consisted of four subtotal lobectomies, with two recurrences; four total lobectomies, with one recurrence; and two with excision of the nodule only, with one recurrence. Both of the latter were followed within one month with a limited and a radical neck dissection respectively and cannot be considered as simple nodule excision for recurrence figures. Of the two neck dissections done after nodule-only excision, one was a limited dissection followed in two years by a radical dissection for recurrence. The other was a bilateral radical dissection. Both are living without evidence of recurrence.

Group III. Undifferentiated Carcinoma.—Three of five patients in this group expired within five years after surgery. Only one had definitive surgery and this consisted only of subtotal lobectomy. The two others had subtotal lobectomy without recurrence.

Discussion

It is evident from this series that in certain instances of thyroid carcinoma, especially the papillary variety, limited removal of the neoplasm is occasionally curative. However, such a plan of therapy is followed by a significant number of recurrences. In the group of papillary adenocarcinomas in this series, recurrences occurred in eight of nineteen patients, or 42 per cent. Further-

more, five, or 26 per cent, of this group died from the disease. In the group of ten with follicular carcinomas, four, or 40 per cent, developed recurrences and one patient succumbed from the neoplasm.

That papillary adenocarcinomas of the thyroid grow and metastasize slowly is well recognized. Thus, it is possible for limited excision to effect a cure. These features of papillary adenocarcinoma of the thyroid have resulted in divergent opinions as to how radical surgery should be for this lesion. Crile² had advocated conservative surgical procedures for this malignancy. Others have advised that radical neck dissections be carried out concomitant with total lobectomy for the primary thyroid lesion whether or not regional node metastases are clinically evident.³⁻⁶ Several investigators have emphasized that five and ten-year follow-up evaluations are inadequate, since fatal recurrences of thyroid carcinoma may occur many years following the original surgery.⁷⁻⁹ Also, some papillary adenocarcinomas of the thyroid enlarge rapidly and metastasize widely to regional nodes over a short period of time.¹⁰ It appears to us that a procedure consisting of unilateral total lobectomy with excision of the thyroid isthmus and ipsilateral radical neck dissection will be, in general, the operative procedure of choice for papillary and follicular adenocarcinoma of the thyroid. Total thyroidectomy is indicated where there are multiple foci of malignancy in the gland.

It is not possible to predict which lesions will respond to limited surgery. The risk of more radical surgery is low. The malignancy has already spread to involve regional cervical lymph nodes in approximately 50 per cent of the patients with papillary adenocarcinoma even though the metastases are not clinically evident.⁵ A significant number of patients with papillary and follicular adenocarcinoma of the thyroid will die of the disease. Most of the patients with these types of thyroid malignancy are young and have a long life expectancy. Thus, more radical surgery appears reasonable and justified. The more radical surgery for this disease need not be more mutilating than repeated, limited procedures.

In undifferentiated carcinoma of the thyroid, radical procedures, if possible, are indicated. However, the lesion is frequently so extensive that definitive surgery is impossible.

There is no evidence available from this study

pertaining to the desirability or efficacy of mediastinal dissection for thyroid carcinoma. The data regarding postoperative radiation therapy is also inconclusive, but our data do not indicate that radiation has been curative in itself. Approximately an equal number of recurrences occurred in those patients who received, and those who did not receive, radiation therapy.

Summary and Conclusions

1. A follow-up study has been carried out on the thirty-seven patients with carcinoma of the thyroid treated surgically between 1924 and 1951. All patients were followed a minimum of three years or to death.

2. Most of the malignant lesions of the thyroid are of the papillary or follicular variety or a mixture of these two. Although these lesions frequently enlarge and metastasize slowly, they will cause death in a significant number of patients.

3. Evidence from this study supports the view that, even though limited excision of thyroid carcinoma can be curative, recurrences which can be fatal occur with sufficient frequency to warrant total thyroid lobectomy with excision of the

isthmus and ipsilateral radical neck dissection as the procedure of choice in treating papillary and follicular varieties of thyroid carcinoma.

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CANCER REGISTRIES

(Continued from Page 450)

mittee are the American Cancer Society—Southeastern Division, the American Cancer Society—Michigan Division, Michigan Department of Health, Michigan Health Officers Association, Michigan State Dental Society, Michigan State Medical Society.

The Michigan Tumor Registry has operated for six years as a voluntary effort sponsored by the Michigan Pathological Society and other organizations interested in cancer control. It has been felt that it should extend its operations and start a central registry for cancer cases in the three counties served by the Southeastern Michigan Division of the American Cancer Society. The

Michigan Pathological Society has been requested to seek the endorsement of the State Medical Society for this operation. The Board of Trustees of the Southeastern Michigan Division has approved of this action and is willing to support it.

Since most hospitals are now conducting registries within their institution, the first and most important step in the success of a central registry has already been accomplished. It depends upon the cooperation of a group of well-established hospital registries. The value and purpose of a hospital registry can be enhanced by the services of a well-conceived and properly functioning central registry.

Diagnostic Difficulties in Carcinoma of the Colon

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THE THREE principal factors in the management of carcinoma of the colon are the nature of the disease itself, the personality of the patient, and the physician. The latter two are of particular importance because if the nature of the disease itself is fixed, the patient's attitudes and the physician's preparedness theoretically are not.

Carcinoma of the colon, as neoplasms elsewhere, occur predominantly in the older age groups. Its cause is not known, and the only known predisposing factors are polyps, either primary or secondary to ulcerative colitis. The symptoms are due principally to the complications of the disease and not to the mere presence of the tumor. It is these complications of bleeding, obstruction, perforation and distant metastases that bring the patient sooner or later to the physician. For a disease that is readily diagnosable, and that is surgically curable, a five-year survival rate of less than 30 per cent^{1,2} is not a brilliant yield.

The diagnosis of carcinoma of the large bowel is easy enough in the patient who has rectal bleeding, abdominal pains or changes in bowel habits who promptly seeks medical advice, is sigmoidoscoped and has a barium enema. It does not detract from the importance of rectal or sigmoidoscopic examinations to state that either one alone or in combination without an x-ray of the lower bowel does not constitute a satisfactory examination for carcinoma of the colon.

There is as yet no mass method of diagnosing cancer of the colon. Each patient has to be studied individually and his co-operation is the first prerequisite. Too frequently, however, there is recourse to various cures for hemorrhoids and constipation advertised on radio and television before a diagnosis is made, and precious time is lost. Even so, diagnosis can, for various reasons, be very confusing. Some of these problems were brought out from a review of the cases of carcinoma of the colon seen at the Sinai Hospital of Detroit.

A common problem is that of the patient who has been known to have diverticulitis for years, and either because of a change of symptoms or the radiographic appearance, the question of carcinoma arises. The problem may not be resolved even at laparotomy. There is frequently delay by the patient because he ascribes the new symptoms to his antecedent disease and delay by the physician because of his reluctance to explore an elderly patient for an equivocally malignant lesion.

Similarly, patients with chronic ulcerative colitis may develop carcinoma without any new symptoms, and it may be impossible for the roentgenologist to determine whether the mucosal changes are due to pseudo-polyps or carcinoma.

Fever of unknown origin is a common enough medical problem. All experienced physicians consider neoplasms as a possible cause for fever, but infections by various organisms and in various anatomic regions and the lymphomata are usually considered first. The correct diagnosis may be impeded by misleading findings. A thirty-three-year-old woman had been hospitalized elsewhere for what was thought to be pneumonia. In spite of the use of all the broad-spectrum antibiotics, her spiking fever persisted over a period of months. A hematologist thought she had abdominal Hodgkin's disease; biopsy of a cervical node was suggestive of histoplasmosis or torulosis. A barium enema demonstrated carcinoma of the transverse colon and at laparotomy there was widespread metastasis. Another patient had low grade fever for six months and rectal bleeding for six weeks. A rectal polyp was found and fulgurated but the fever persisted until a carcinoma of the colon, that was subsequently demonstrated by x-ray, was removed.

Not infrequently the patient's presenting symptoms are extraintestinal and due to involvement of another organ by metastasis or irritation. Offen³ recently reported six cases of what were considered to be primary ovarian tumors. In two cases it was at the pathologist's suggestion (Dr. S. D. Kobernick), after studying the sections of the

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ovarian tumor, that x-ray studies of the colon were done and the primary lesion in the colon was discovered; the ovarian tumor which gave the patients their symptoms represented metastases. These surprises may be avoided if complete gastrointestinal x-ray studies are done before such patients are operated on.

A thirty-one-year-old patient was admitted with a diagnosis of carcinoma of the bladder because of dysuria, a mass in the lower abdomen, and anemia. X-ray of the lower bowel was done because of bloody diarrhea on one occasion. Carcinoma of the sigmoid was demonstrated. The presenting urinary symptoms were believed to be due to attachment of the neoplasm to the dome of the bladder.

Another patient was admitted for a cataract operation but had no other symptoms. An admission photo-fluorogram, and a subsequent regular chest film, revealed pulmonary opacities. Comparison with several previous chest films revealed a gradual increase in the size of these opacities. The roentgenologic interpretation was metastatic carcinoma. Barium enema revealed that the primary lesion was in the colon. The patient was entirely asymptomatic.

One cannot depend invariably on the surgeon's ability to find an unsuspected carcinoma at a laparotomy done for some other purpose. Some parts of the colon, notably the flexures, are not readily accessible to palpation and can be easily missed even after a careful search. A sixty-five-year-old man was admitted because of melena. He had had a gastroenterostomy twenty-five years previously for a duodenal ulcer. A barium meal demonstrated an ulcer niche from which the bleeding could have come. The gastroenterostomy was undone and the patient had a subtotal gastric resection. The surgeon noted no other abnormalities in the abdomen. The patient had a slow convalescence from the surgery and within a year was admitted with hepatic metastasis from carcinoma of the hepatic flexure. The carcinoma very likely was present at the time of the gastric resection one year before but was not discovered by palpation.

In carcinoma of the cecum, obstruction is a late manifestation. The patient's symptoms may be entirely referred to the upper abdomen,⁴ and carcinoma of the stomach rather than of the cecum may be suspected. X-ray studies limited to the upper gastrointestinal tract will of course fail

to reveal the cecal lesion, and the unsuspecting physician may ascribe the patient's symptoms to functional disease.

Some of the more obvious errors are to assume that a barium meal alone can exclude a lower bowel carcinoma, or to blame a rectal polyp for bleeding without searching for a carcinoma more proximally. The frequently made statement that 70 per cent of all lower bowel carcinomas can be detected either by the finger or the sigmoidoscope⁵ is perhaps an oversimplification. Many carcinomas will be missed if x-ray examinations are not also done.

Some of our patients claimed to have had no symptoms until the onset of obstruction. On careful questioning, however, it was elicited, for example, that several months before there had been rectal bleeding lasting only one day. Both physician and patient usually think that a symptom of a serious disease will not occur for one or two days and then disappear. Transitory symptoms, it should be emphasized, may be the forerunners of serious trouble and should not be ignored.

Another problem tending to delay clinical diagnosis is the tendency for the patient to blame new symptoms on previous chronic illness. One patient had known for many years that she had chronic gall bladder disease. Surgical treatment was delayed until symptoms became very severe. The physician whom she consulted for the treatment of her gall bladder disease found that the recent aggravation of her supposed cholecystitis was due to an inoperable carcinoma of the colon.

The patient's attitude towards his illness is usually an extension of the pattern in which he has faced his other problems in life. He may deny their existence, or minimize their importance, or unconsciously choose a method that will lead to his destruction. All the fears he may have had of insecurity, dependency, humiliation, mutilation and death seem to conspire at this time of illness in his old age. The following are examples of such attitudes. A man of sixty-seven, who had never married, ignored his symptoms for two years, partly because he couldn't admit to himself that he was ill, and also because he feared that he might become an unwelcome burden to his brothers with whom he was never close. He sought help only when his life was almost at an end. Just as he feared, there was no place for

him at the homes of his kin; he died in a charity institution.

Another patient was a chronic alcoholic with severe heart disease who had rectal bleeding for two years before he consulted a physician. By that time he already had obvious liver metastasis from cancer of the large intestine.

Another group that frequently dooms itself and is helped along by its well-meaning children is the elderly. The reasoning is that at sixty-eight the patient will probably die of another disease before the existing cancer causes death. Why subject him to what is in all likelihood an unnecessary operation? These patients often become obstructed or perforate and have to undergo emergency surgery when ill prepared for it and when cure is no longer possible. One such patient had a diagnosis of cancer made seven years before and finally died of intestinal obstruction.

Any patient who has been treated for carcinoma of the colon should be under medical observation not only for the management of possible recurrence but also because of the greater susceptibility to another carcinoma in the colon. One of the patients had a carcinoma of the colon removed. Eight months later she had a routine follow-up barium enema which showed a polyp in

the more proximal colon. A frozen section was suggestive of stalk invasion and a wedge resection was done.

Summary and Conclusions

The diagnosis of carcinoma of the colon is usually not difficult, but may be so. Antecedent diseases, fever, and extra-intestinal symptoms may divert the physician's attention from the colon. An important factor in the early diagnosis and cure is the patient's attitude and method of dealing with life's problems, including that of cancer.

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GASTROINTESTINAL CARCINOMA

(Continued from Page 467)

and the patient developed increasing pain requiring large doses of narcotics. For these reasons the patient was referred to us for palliation with Cobalt⁶⁰ radiation.

A series of Cobalt⁶⁰ teletherapy treatments was started on August 19, 1954, and the fields included the low lumbar and perineal regions. A depth dose (midline pelvis) of 4000r was delivered in five weeks. Final treatment was given September 23, 1954. The patient experienced no difficulties from irradiation. Marked improvement was noted, the pain vanished, and the patient stopped taking narcotics.

On January 13, 1955, however, the patient noted onset of upper lumbar pain. Palliative irradiation to this area (1700r in two weeks) resulted in decreased pain. He remained asymptomatic for four months.

On May 25, 1955, the patient was seen and complained of frequent vomiting and upper and abdominal pain. X-ray examination at this time revealed mechanical obstruction of small bowel. He experienced repeated severe bouts of obstruction and was finally explored on July 21, 1955, when metastatic adenocarcinoma was found. The patient developed cardiac arrhythmia, decompensation, and expired on July 21, 1955.

The final autopsy diagnosis was peritoneal carcinoma-

tosis with adhesions and small bowel obstruction, extensive metastases to liver, gall bladder, serosal surfaces, mesentery and omentum. It was especially interesting that the perineal area, which had received the largest amount of irradiation, showed only minimal involvement.

Conclusion

Cobalt⁶⁰ teletherapy provides a super-voltage modality for the treatment of lesions of the gastrointestinal tract without disturbing side effects. Palliation only should be expected, and this was accomplished to a moderate or marked degree in 29 per cent of all cases. Relief of pain occurred as a most subjective result in 75 per cent of patients having such complaints. In general, results were best in carcinoma of the colon and rectum (38 per cent).

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Cancer of the Stomach

By Cameron Morrison, M.D.,
and Gerald S. Wilson, M.D.
Detroit, Michigan

THERE have been 128 cases of carcinoma of the stomach initially treated at the Dearborn Veterans Administration Hospital from January, 1947, through December, 1954. During this eight-year-period only those cases proven to be gastric adenocarcinoma at operation or at autopsy were included in the survey. Although this series is relatively small, it has the value of being well documented with excellent follow-up records. A similar study at the Detroit Receiving Hospital and a private institution is now in progress which will supplement this group and add valuable comparative data.

There were 128 men and no women, reflecting the predominantly male population of the Veterans Administration Hospital (Table I). Although nearly 50 per cent of the patients were in the sixth decade of life, there were an appreciable number in the thirties, and one patient was twenty-seven years of age. There were ninety-six white and thirty-two negro patients.

TABLE I. 128 CASES OF CARCINOMA OF STOMACH AT DEARBORN VETERANS HOSPITAL
January, 1947, through December, 1954 (8 years)

Sex		Color	
Males	128	White	92
Females	0	Negro	32
Age			
20-29	1		
30-39	9		
40-49	10		
50-59	61	Youngest	27 years
60-69	32	Oldest	81 years
70-79	14		
80-89	1		
Total	128		

One of the most distressing problems in relation to gastric carcinoma is the difficulty of detecting the malignancy in an early stage while a curable resection may still be feasible. Because the human stomach is such an adaptable organ, early symptoms of the disease are likely to be vague and disregarded for long periods of time by both the patient and the physician. This delay in suspecting a gastric lesion is borne out in our series in

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that approximately one-half of the patients experienced symptoms for three months or longer before admission and one-third for six months or longer, with the distribution as noted in Table II.

TABLE II. DURATION OF SYMPTOMS PRIOR TO ADMISSION

0-1	21
1-3	37
3-6	23
6-9	19
9-12	6
Over 12	9
Unknown	13
	128
3 months or longer	55 (50 per cent)
6 months or longer	34 (30 per cent)

The most common initial symptom was upper abdominal pain but in a number of instances the patient first noticed epigastric distress or discomfort short of actual pain (Table III). In three instances the patient's first complaint was his feeling of an abdominal mass.

TABLE III. INITIAL SYMPTOMS

Abdominal pain	62
Epigastric distress	27
Anorexia	10
Vomiting	8
Weight loss	6
Weakness	6
Constipation	3
Abdominal mass	3
Hematemesis	2
Tarry stools	1

Upper abdominal pain was the most frequent presenting symptom, followed by vomiting, anorexia and nausea, tarry stools, weakness, dysphagia, and finally a palpable mass (Table IV).

TABLE IV. PRESENTING SYMPTOMS

Epigastric pain	109
Vomiting	47
(a) Blood	16
Anorexia and nausea	43
Tarry bloody stools	22
Weakness	18
Dysphagia	6
Palpable mass	5

Although most of the patients were free of symptoms referable to the stomach until the onset of their present illness, it is of considerable interest that approximately 20 per cent of the patients volunteered a typical peptic ulcer history for periods varying from five to twenty-five years

(Table V). In the latter cases there was a history of an ulcer having been demonstrated by upper gastrointestinal series in eight instances; previous surgery had been performed for peptic ulcer in

TABLE V. PAST HISTORY RELATIVE TO ULCER SYMPTOMS

No ulcer symptoms until onset of present illness	102
Ulcer symptoms for over five years	26
History of gastrointestinal series showing ulcer	8
Previous surgery for ulcer	3
Gastrointestinal tract bleeding	2
Gastrointestinal series showing duodenal ulcer at Veterans Administration Hospital	7
Duodenal ulcer proven at surgery at Veterans Administration Hospital	1

three cases; gastrointestinal tract bleeding had occurred in two; and seven patients showed duodenal ulcers by x-ray at the Dearborn Veterans Hospital during a previous admission. Only one patient, however, was proven at surgery to have a duodenal ulcer associated with the gastric neoplasm. The actual demonstration of a duodenal ulcer at operation in only one instance in this series agrees with other published reports¹ that the association of a duodenal ulcer with a gastric carcinoma is rare.

TABLE VI. PHYSICAL FINDINGS

Palpable mass	36
Abdominal tenderness	35
Enlarged liver	19
Palpable lymph nodes	8
Edema	5
Rectal shelf	4
Jaundice	3
Enlarged spleen	2
Blood on rectal exam	2
Ascites	2
No positive findings	49

The most commonly encountered positive physical finding at the time of admission was the presence of a palpable abdominal mass in thirty-six instances, followed by abdominal tenderness in thirty-five, an enlarged liver in nineteen, palpable lymph nodes in eight, edema of the extremities in five, rectal shelf in four, jaundice in three, enlarged spleen in two, blood on rectal examination in two, and ascites in two (Table VI). The palpable lymph nodes were usually cervical and were obviously involved by carcinoma. Approximately one-third of the cases showed no positive physical finding. As has been pointed out by other observers,² a palpable mass does not indicate a non-resectable or incurable lesion, in that nine patients with abdominal masses in the present series underwent gastric resection, three surviving five years.

Examination of the gastric aspirate by the twelve-hour night secretion method was performed in eighty-three instances (Table VII). Fifty-four

patients (65 per cent) showed complete anacidity, seven showed values of free acid less than 20 units, eleven between 20 and 40 units, and in eleven cases hyperacidity was demonstrated.

TABLE VII. LEVEL OF FREE HCL

Tests performed	83
Absent	54 (65 per cent)
Under 20	7
20-40	11
Over 40	11

The barium meal constitutes the most accurate means of diagnosing gastric malignancy, although lesions located in the fundic portion of the stomach are likely to be missed and pyloric lesions may give only indirect evidence of their presence by producing obstructive phenomena. A barium meal was administered in 121 instances in this series, and the lesion was identified and correctly designated as malignant in the vast majority of cases (Table VIII). In ten cases, however, the lesion was missed, the most common anatomical location of error being the fundus.

TABLE VIII. GASTROINTESTINAL SERIES

Performed	121
Lesion missed	10
Gastroscopic Examination	
Performed	47
Lesion missed	10

Gastroscopic examination was performed in forty-seven of the 128 cases and the lesion visualized in thirty-seven instances. More important, gastroscopy demonstrated the malignancy in three instances where it had been missed by x-ray studies. This agrees with the general concept that x-ray and gastroscopy are both valuable diagnostic procedures and should supplement one another.

The gross pathologic anatomy of gastric carcinoma is dependent upon the direction in which the various forms of carcinoma spread from their origin in the epithelium of the stomach.³ If the speed of growth is greatest toward the lumen, a cauliflower-like projection results and is termed a fungating carcinoma. These eventually grow laterally and also penetrate the wall of the stomach but at a relatively slow rate. Forty-one of the cases in this series were of the fungating type (Table IX). In the more dangerous penetrating variety, ulceration occurs initially, tending to mimic benign gastric ulcer, growth is away from the lumen and rapidly reaches the serosa. This variety was present in forty-one of the patients

in our series. The superficial spreading variety of carcinoma tends to remain locally confined to the mucosa and occurred in one instance in this series. The linitis plastica variety of carcinoma

to the inclusion in our series of only proven cases (Fig. 2). Fourteen per cent were not suitable for operation. Fifty-three per cent of the total

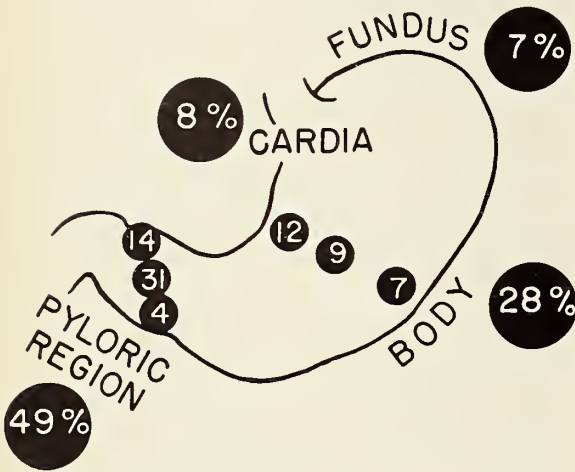


Fig. 1. Location of carcinoma at surgery (8 per cent involved almost entire stomach).

originates from the deepest glands in the mucosa and permeates the entire gastric wall stimulating the production of abundant fibrous tissue. Two of our cases were of this variety. In fifty-seven instances, the lesion was not capable of gross classification, either because of the advanced stage of the disease or because the stomach was not opened at surgery.

TABLE IX. GROSS PATHOLOGY

Penetrating (ulcer)	41
Fungating	27
Superficial spreading	1
Linitis plastica	2
No special type	57

The anatomical location of the malignancy was determined by reviewing the operative report, the surgical pathology report, and in some instances the autopsy protocol. Almost 50 per cent of the lesions were situated in the distal third of the stomach (Fig. 1). In 25 per cent the lesion was in the body; in 9 per cent in the fundus; and in 10 per cent in the paracardial region. In 9 per cent the involvement was so extensive that more than one anatomical division of the stomach was involved.

Our operability rate of 86 per cent is high compared to other series^{2,4} and is in part due

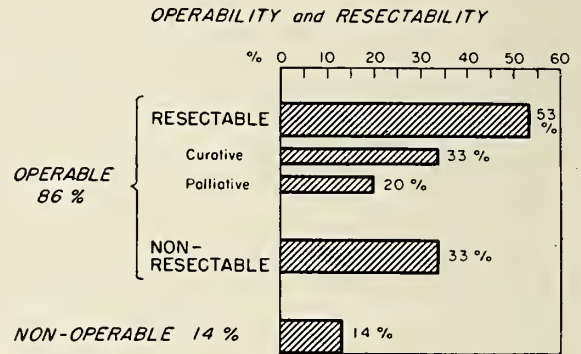


Fig. 2. Operability and resectability rates.

number of cases underwent gastric resection; 33 per cent for cure and 20 per cent for palliation. In the latter group it was obvious to the operating surgeon that all malignant tissue had not been removed. Thirty-three per cent were not felt to be suitable for resection.

Of the sixty-eight gastric resections, fifty-three were of the so-called radical subtotal variety and fifteen were total gastrectomies (Table X). In the subtotal group there were five postoperative deaths, giving an operative mortality of 9 per cent. (An operative mortality has been arbitrarily designated as a death occurring within thirty days of the operation regardless of the cause, or within any time interval if the death was attributable to the operation.) One death resulted from a pulmonary embolus on the twenty-first postoperative day, one from a ruptured aortic aneurysm on the thirteenth postoperative day, and one from bleeding esophageal varices on the second postoperative day. One patient died of an unrecognized strangulating bowel obstruction secondary to an adhesion at the site of a previously performed appendectomy, and one patient succumbed to pancreatitis on the forty-fifth postoperative day. Five operative deaths followed total gastrectomy, giving an operative mortality of 33 per cent. One patient died during the third postoperative month as the result of an esophageal fistula; another died one month postoperatively as the result of an evisceration and the development of a large bowel fistula, and a third died on the nineteenth postoperative day as the result of gangrene of the

transverse colon. The two remaining deaths occurred as the result of a hemolytic transfusion reaction and a pulmonary embolus. The total number of deaths, therefore was ten, resulting in

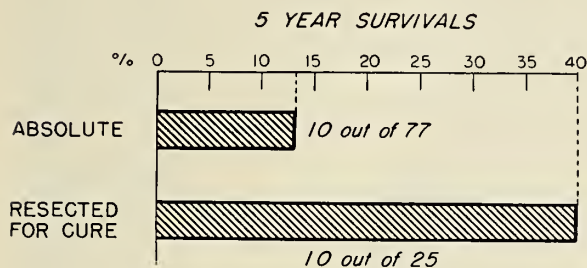


Fig. 3. Five-year survival rate.

an over-all operative mortality of 14 per cent. The over-all operative mortality in this series, and especially the mortality in the subtotal gastrectomy group, compares favorably with other reported series.^{2,4-7}

TABLE X. OPERATIVE MORTALITY

	No. Cases	No. Deaths	Mortality
Subtotal Gastrectomy	53	5	9.42 per cent
1. Pulmonary embolus	—21 days		
2. Rupture aortic aneurysm	—13 days		
3. Small bowel obstruction	—21 days		
4. Bleeding esophageal varices	—2 days		
5. Pancreatitis	—45 days		
Total Gastrectomy	15	5	33 per cent
1. Esophageal fistula	—3 months		
2. Evisceration, large bowel fistula	—1 month		
3. Gangrene transverse colon	—19 days		
4. Blood transfusion	—3 days		
5. Coronary occlusion	—3 days		
All Resections	68	10	14.6 per cent

Through the efforts of the Tumor Board of the Dearborn Veterans Hospital, all 128 patients in this series have been successfully followed. Seventy-seven of the 128 cases were operated on five or more years prior to the final follow-up survey of February, 1956, resulting in an absolute five-year survivorship of 13 per cent (Fig. 3). This absolute survival is high in comparison to other reported series,^{2,4-7} partly because of the exclusion of all cases from this series unless proven at

operation or autopsy. Twenty-five of the seventy-seven cases were resected with the possibility of cure, resulting in a five-year survivorship of 40 per cent for those resected for cure. Although the number of cases involved is rather small, this excellent outlook for those patients who are resected in a stage where the surgeon believes he has removed all grossly malignant tissue offers considerable encouragement to those interested in the treatment of gastric malignancy.

Summary

1. One-hundred and twenty-eight cases of gastric carcinoma initially treated at the Dearborn Veterans Hospital during an eight-year period, from January, 1947, through December, 1954, are reviewed.

2. Fifty-three per cent of the entire series underwent gastric resection, 33 per cent with the hope of cure and 20 per cent as a palliative procedure.

3. The over-all operative mortality of 14 per cent is discussed in relation to subtotal and total gastrectomies.

4. A five-year survivorship of 40 per cent of those resected for cure was found in this group of patients.

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"OPEN HOUSE" AT WMA SECRETARIAL OFFICE

During the entire week of the AMA meeting, June 1-6, 1957, there will be "open house" for U. S. Committee members at the World Medical Association office on the 12th floor of the Coliseum Towers, immediately adjoining New York's famous Coliseum, where the

AMA's Scientific and Technical Exhibits are to be housed.

Members are urged to come up for a welcome respite from the exhibit crowds, to enjoy a cup of coffee, and see the home office of the "international voice of medicine."

Herniation of Abdominal Viscera into the Thorax through the Foramen of Bochdalek

By Herbert L. Fishbein, M.D.,
and Samuel Fink, M.D.
Detroit, Michigan

DIAPHRAGMATIC hernias occur at weak points in the diaphragm, usually at sites of fusion of several components—at the foramen of Morgagni (between the sternal and costal portions), at the foramen of Bochdalek (between the costal and lumbar portions), at the visceral foramina (the esophageal hiatus), and where failure of development or congenital absence of a segment of diaphragm occurs.⁹

The classification of diaphragmatic hernias can be made on an etiologic basis. They may be congenital or acquired, traumatic or nontraumatic, true (hernial sac) or false.

The most common site of herniation is at one of the visceral foramina, the most important of which is the esophageal hiatus. The next most common site of herniation is in the posterior portion of the left dome of the diaphragm, because it is the last part to fuse. Failure of fusion of the pars costalis with the pars lumbalis results in a persistent pleuroperitoneal hiatus, or foramen of Bochdalek. This area is a common site of herniation in children.³

Less commonly, a hernia may present through a defect at the site of fusion of the pars sternalis and the pars costalis, forming the foramen of Morgagni.

Congenital defects are usually present at birth but actual herniation may not occur or be recognized until later in life.

Embryology

Embryologically, the anterior and lateral costal portions of the diaphragm arise from the ventrally located septum transversum which eventually forms most of the muscular elements of the diaphragm. The septum transversum originates in the cervical region, accounting for the cervical source of the phrenic nerve. The posterior and lateral portions of the diaphragm are derived from the pleuroperitoneal membrane and, posteromedially, from the dorsal mesentery.

From the Department of Radiology, Lakeside Medical Center, Detroit, Michigan.

Case Presentation

E. S., a thirty-nine-year-old white woman, was well until July, 1949, when she was involved in a severe automobile accident, striking her abdomen against the steering wheel and at the same time sustaining fractures of the left hip, right ankle and the skull. She was treated at a local hospital and during her stay experienced vague upper abdominal discomfort accompanied by occasional short episodes of nausea. Her abdominal symptoms persisted to a mild degree after her discharge from the hospital, but she never consulted a physician about them.

In December, 1954, she was involved in a less serious automobile accident, again striking her abdomen against the steering wheel. The vague abdominal symptoms, which had persisted since the previous accident, became markedly increased, now accompanied by anorexia and episodes of nausea and vomiting. She was then admitted to the Lakeside General Hospital.

Chest roentgenograms taken on admission revealed a fluid level in the lower part of the left thoracic cavity. The fluid apparently was contained in a sac, and the additional finding of gas within this area suggested loops of bowel, herniated through the left posterior diaphragm (Figs. 1 and 2). In Figure 2, the bowel contour has been outlined with crayon pencil. On the basis of these findings, a complete study of the gastrointestinal tract was done.

A barium enema (Figs. 3 and 4) revealed splenic flexure, portions of transverse colon and descending colon in the left posterior thoracic cavity, passing through a defect in the posterior aspect of the left dome of the diaphragm (note diaphragm outlined by crayon pencil in the photographs).

A study of the upper gastrointestinal tract revealed (Figs. 5 and 6) a complete inversion of the stomach which appeared to be almost completely herniated into the left thorax, through the same diaphragmatic defect.

She underwent surgery in January, 1955. There was a large tear in the posterior portion of the left dome of the diaphragm, corresponding to a foramen of Bochdalek. There was some scarring present as well, apparently representing a traumatic lesion. The tear extended from the posterolateral diaphragmatic attachment, across the dome of the diaphragm, to within two centimeters of the esophageal hiatus. A large segment of transverse colon, splenic flexure, and descending colon were herniated through the defect into the left thoracic cavity, as well as omentum, the entire stomach, and spleen. There was no evidence of a peritoneal sac.

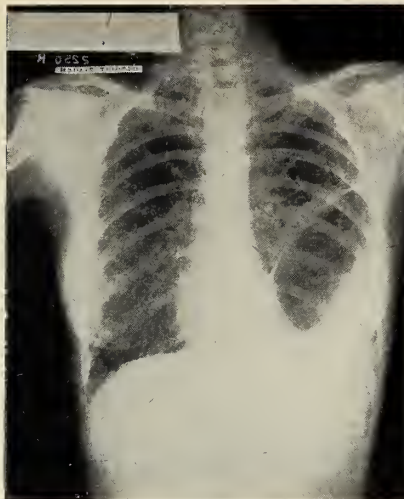


Fig. 1.

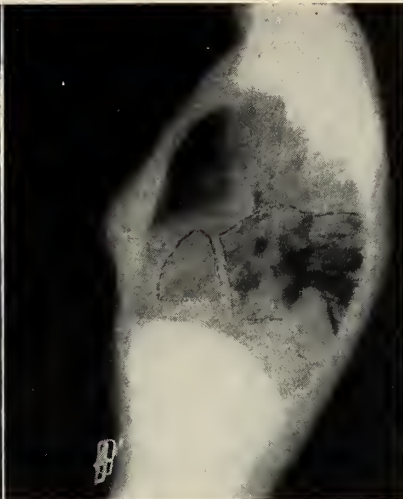


Fig. 2.

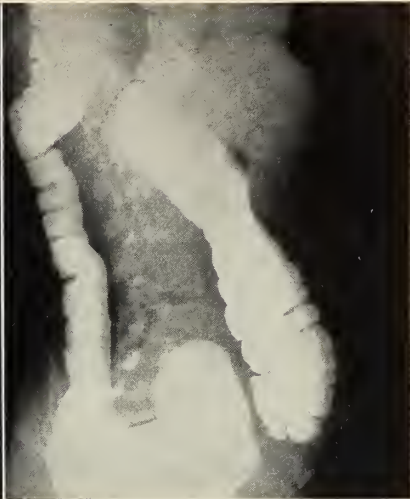


Fig. 3.

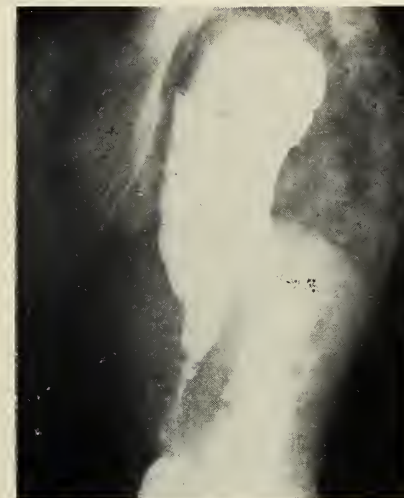


Fig. 4.

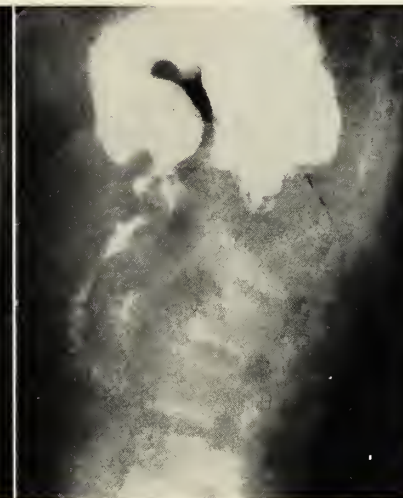


Fig. 5.

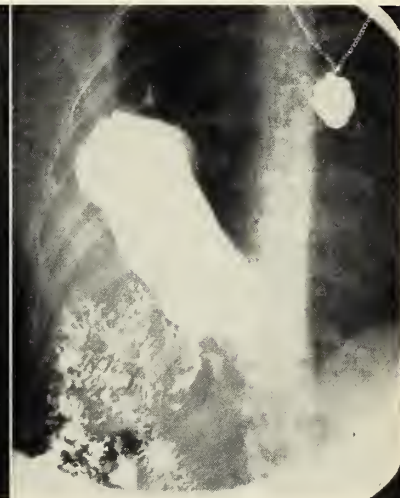


Fig. 6.

The lower left pulmonary lobe was collapsed and displaced toward the mediastinum.

Because of adhesions, the spleen was resected and the other involved organs pushed back into the abdominal cavity, followed by repair of the defect.

The patient made an uneventful recovery and was discharged four and one-half weeks following surgery.

Discussion

The patient reported in this paper apparently had a congenital malformation and either an existent or potential foramen of Bochdalek. The trauma resulting from two automobile accidents completed the defect so that the involved viscera herniated into the left thorax. The scarring found at surgery and the markedly widened defect would seem to indicate a long-standing or chronic process, possibly begun following the first accident. The

absence of a peritoneal sac would seem to indicate a basic congenital etiology, since the presence of a sac usually indicates trauma as the basic etiologic factor.

Acknowledgment

We wish to acknowledge, with sincere appreciation, the clinical material furnished on this case by Dr. Kenneth Campbell, and Dr. Joseph Arena, Jr.

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(Continued on Page 503)

A Page from Medical History

IV. The Hebrews

By John E. Summers, M.D.
Grand Rapids, Michigan

"ARGENTINA

"Unexpected Trends in the Art of Healing.—Some unexpected developments have taken place in this country in recent years. Official diplomas have been granted, after previous examination, to practitioners of two kinds. The members of one group claim that through clairvoyance, they can see the body organs and diagnose the patient's illness. They give advice as to whether operations recommended by surgeons are necessary; in most cases they give their approval. Members of the other group predict future events and state that they can see persons not in the room. Neither group is allowed to practice medicine, and both are cautious not to interfere with the activities of competent physicians.

"An American evangelist, Tommy Hicks, from Lancaster, California, has been speaking to groups of 10,000 to 40,000 persons assembled on football fields. He claims that faith in God can completely cure most diseases. Many people of Buenos Aires, having become conditioned to the authority of radio addresses, are readily impressed by anything broadcast over a loud speaker. The number of persons announcing the cure of cancer, hypertension, etc., without any demonstrable evidence has greatly increased." (*J.A.M.A.*, 155:1179, July 24, 1954.)

PALESTINE, the land bridge between Mesopotamia and Egypt, has recently been the site of another attempt by the Jews to establish a homeland. This has resulted in the ousting of some 700,000 Arabs from their home.⁹ Palestine and the Hebrews are of special interest to us because their literature forms the basis of our religious ideas.

The word Palestine is derived from Philistine. Knowledge of the Jews is derived from internal sources (The Old and New Testaments) and external sources (archeologic investigations). The Old Testament by no means includes the whole of the ancient Jewish writings. The present text of the Old Testament is thought to have become fixed between the sixth and eighth centuries A.D. A number of ancient Jewish writings not authorized as being inspired are collectively known as the Apocrypha. It is an interesting fact that the oldest existing manuscript of the Hebrew

Old Testament, The Codex Babylonicus Petropolitanus, goes back only to 916 A.D. The present text of the New Testament was not fixed until 382 A.D. at a Council of the Church held in Rome. At least 109 books of the New Testament are not included in our present text.⁴

The Jews came rather late onto the stage of civilization. Several Babylonian civilizations had risen and fallen. Egypt had already reached her Golden Age and was declining in political power. The Hittite Empire had risen and fallen. The Aegean civilization (a very high stage of civilization had been attained on the island of Crete) had been destroyed by the invading Greek barbarians and some of the Cretans had fled to Canaan where they were known as Philistines.

The Hebrews played a minor rôle in the theater of ancient history. Herodotus mentions them only three times. One reference pertains to circumcision. The second concerns the conquests of a Pharaoh called Sesostris. This Pharaoh left victory monuments in the countries which he conquered. In those countries which submitted to him without a struggle, "he inscribed on the pillars, in addition to these particulars, female genitalia to mark that they were a nation of women, that is, unwarlike and effeminate. . . in the part of Syria called Palestine, I myself saw them still standing, with the writing above mentioned, and the genitals distinctly visible."

The third reference is included in the list of nations which accompanied Xerxes on his invasion of Greece. "The Phoenicians, with the Syrians of Palestine, furnished 300 vessels, the crews of which were thus accoutred: upon their heads they wore helmets made nearly in the Grecian manner; about their bodies they had breast plates of linen; they carried shields without rims; and were armed with javelins. This nation, according to their own account, dwelt anciently upon the Red Sea, but crossing thence, they fixed themselves on the sea-coast of Syria, where they still inhabit. This part of Syria, and all the region extending from hence to Egypt, is known by the name of Palestine."

It must be admitted that insofar as it can be

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determined, the ancient Jews did not make any headway in the field of medicine. In fact, they developed very little in the way of culture besides their literature.

The only surgical operation mentioned in the Old Testament is that of circumcision. Circumcision had been practiced in Egypt for well over one thousand years before the Jews began to drift in from the Arabian desert and to take the promised land. This operation of circumcision must have been a fairly rough one when one considers the disability consequent upon it. This is illustrated by the affair of Dinah and Shechem. Dinah, the daughter of Jacob, was raped by Shechem. Following this Shechem desired to marry her. He proposed honorable marriage and a large dowry but this did not satisfy Dinah's father and two brothers:

Genesis, 34:

13. And the sons of Jacob answered Shechem and Hamor, his father, deceitfully, and said, because he had defiled Dinah, their sister:

14. And they said unto them, We cannot do this thing, to give our sister to one that is uncircumcised; for that were a reproach unto us:

15. But in this we will consent unto you: If ye will be as we be, that every male of you be circumcised:

16. Then we will give our daughters unto you, and we will take your daughters to us, and we will dwell with you, and we will become one people.

This proposal pleased Shechem and his father, Hamor, so they went to their town and persuaded all of the men to be circumcised. The men were so prostrated by the circumcision that they were unable to defend themselves, so that Dinah's two brothers were able to kill them all.

Genesis 34:25:

And it came to pass on the third day, when they were sore, that two of the sons of Jacob, Simeon and Levi, Dinah's brethren, took each man his sword, and came upon the city boldly, and slew all the males.

When did the Jews enter the theatre of history? A group of clay tablets written in cuneiform were found in the Pharaoh Akhnaton's (Amenhotep IV) capital city. These letters are known as the Tell-El-Amarna Tablets and are from the governors of the provinces of Egypt to the Pharaoh. One such tablet written c. 1377 B.C. is inscribed^{2,3}:

Let the king care for his land. The land of the king will be lost. All of it will be taken from me; there is hostility to me—

But now Habiru (Hebrews) are taking the cities of the king—

If there are no archers this year, then let the king send a deputy that he may take me to himself together with my brothers and we die with the king, our Lord.



Fig. 1. *Paradise Lost. Temptation of Eve* by William Blake

The snake plays a large role in the superstitions of all primitive peoples.

"Now the serpent was more subtle than any beast of the field which the Lord God had made. And he said unto the woman, Yea, hath God said, Ye shall not eat of every tree of the garden? And the woman said unto the serpent, We may eat of the fruit of the trees of the garden: But of the fruit of the tree which is in the midst of the garden, God hath said, Ye shall not eat of it, neither shall ye touch it, lest ye die. And the serpent said unto the woman, Ye shall not surely die: For God doth know that in the day ye eat thereof, then your eyes shall be opened, and ye shall be as gods, knowing good and evil. And when the woman saw that the tree was good for food, and that it was pleasant to the eyes, and a tree to be desired to make one wise, she took of the fruit thereof, and did eat, and gave also unto her husband with her; and he did eat. And the eyes of them both were opened, and they knew that they were naked; and they sewed fig leaves together, and made themselves aprons." (*Genesis, 3:1-8*). (*Courtesy of Museum of Fine Arts, Boston, Massachusetts.*)

In the victory stela of black granite erected by King Merenptah of Egypt c. 1229 B.C., is the only mention in any Egyptian inscription of the name of Israel⁵:

The princes are prostrate, while they say, "peace." There is no one who raises his head among the Nine Bows.

Libya is ruined, Khatti is pacified: The Canaanite land is despoiled with every evil.

Ascalon is carried captive, Gezer is conquered: Yanoam is made as though it did not exist.

The people of Israel is desolate, it has no offspring:

Palestine (Khuru) has become a widow for Egypt. All lands are united, they are pacified: Everyone that is turbulent is bound by King Merenptah,

Given life like Re, every day.

From the available evidence the best guess is that the Hebrews began to enter Palestine c. 1250 B.C. Further; the evidence indicates that the Jews incorporated parts of the teachings of the older Babylonian and Egyptian civilizations in their own writings. The ancient flood story of the Babylonians is found in the account of creation in the Old Testament. Similarities between the code of Hammurabi and the laws of Moses are evident,⁵ the former being over 1000 years older than the latter.

The Jews took over much of the Egyptian civilization. About 1000 B.C., a wise Egyptian, Amenemope, wrote down his advice to his son. Compare a few sentences of Amenemope's advice with the Proverbs of the Old Testament:

Amenemope.—Better is poverty in the hands of God, than riches in the storehouse.

Proverbs, 15:16.—Better is little with the fear of the Lord than great treasure and trouble therewith.

* * * *

Amenemope.—Better are the loaves when the heart is joyous, than riches in unhappiness.

Proverbs, 15:16.—Better is a dinner of herbs where love is, than a stalled ox and hatred therewith.

* * * *

Amenemope.—Better is the praise as one whom men love, than riches in the storehouse.

Proverbs, 17:1.—Better is a dry morsel, and quietness therewith, than a house full of sacrifices with strife.

* * * *

Amenemope.—Fraternize not with the hot-tempered man, and press not upon him for conversation.

Proverbs, 22:24.—Make no friendship with an angry man; and with a furious man thou shalt not go.

* * * *

Amenemope.—Remove not the land mark on the boundary of the fields. Be not greedy for a cubit of land, and trespass not on the boundry of the widow.

Proverbs, 23:10.—Remove not the old landmark; enter not into the fields of the fatherless.

* * * *

The Pharoah Akhnaton (Amenhotep IV) of Egypt attempted to establish the old sun god Re (Aton) as the sole God. He had inscribed in the tomb of Eye, his favorite nobleman, a hymn

of praise to Aton which was echoed centuries later, in the 104th Psalm of the Old Testament:

Thou dawnest beautifully in the horizon of the sky,
O Living Aton, who wast the Beginning of life!
When thou didst rise in the eastern horizon, Thou didst fill every land with thy beauty. Thou art beautiful, great, glittering, high over every land,

Thy rays they encompass the lands, even to the end of all that thou hast made.

Though thou art far away, thy rays are upon the earth: Though thou art in the faces of men, thy footsteps are unseen.

When thou settest in the western horizon of the sky, The earth is in darkness like death.

They sleep in their chambers, Their heads are wrapped up.

Every lion cometh forth from his den, All serpents they sting. Darkness broods, The world is in silence, He that made them resteth in his horizon;

When thou shinest as Aton by day Thou drivest away the darkness.

Men waken and stand upon their feet, Then in all the world they do their work.

How manifold are thy works! They are hidden before men.

O sole God, beside whom there is no other. Thou didst create the earth according to thy heart.

Thou settest every man into his place. Thou suppliest their necessities, Every one has his food, And his days are reckoned.

The tongues are divers in speech, Their forms likewise and their skins are distinguished.

How benevolent are thy designs, O lord of eternity! Thou makest the seasons in order to make develop all that thou hast made.

Winter to bring them coolness, And heat that they may taste thee.

Thou makest millions of forms through thyself alone: Cities, villages, and fields, highways and rivers.

All eyes see thee before them, For thou art Aton of the day over the earth. When thou hast gone away, yet art thou still in my heart.

The religion of a people is said to be an idealized reflection of their own way of life. What were the characteristics of the God of the ancient Hebrews? A few illustrations from the Old Testament might be in order.

The Lord slays Onan because he did not marry his brother's wife.—

Genesis, 38:

8. And Judah said unto Onan, Go in unto thy brother's wife, and marry her, and raise up seed to thy brother.

9. And Onan knew that the seed should not be his; and it came to pass, when he went in unto his brother's wife, that he spilled it on the ground, lest that he should give seed to his brother.

10. And the thing which he did displeased the Lord: wherefore he slew him also.

The Lord refuses to show Moses his face but permits him to see his "back parts."—

Exodus, 33:

18. And he said, I beseech thee, show me thy glory.

20. And he said, Thou canst not see my face: for there shall no man see me, and live.

22. And it shall come to pass, while my glory passeth by, that I will put thee in a cleft of the rock, and will cover thee with my hand while I pass by:

23. And I will take away mine hand, and thou shalt see my back parts: But my face shall not be seen.

The Lord sends two she-bears to destroy forty-two children because the children mocked Elisha.—

II Kings, 2:

23. And he went up from thence unto Bethel: and as he was going up by the way, there came forth little children out of the city, and mocked him, and said unto him, Go up, thou bald head; go up, thou bald head.

24. And he turned back and looked on them, and cursed them in the name of the Lord. And there came forth two she-bears out of the wood, and tare forty and two children of them.

The Lord forgives King David for adultery but requires the child conceived in adultery to die.—King David committed adultery with Bathsheba, the wife of Uriah, the Hittite. After planning the death of Uriah, David married Bathsheba: "But the thing David had done displeased the Lord." (*II Samuel, 11:2, 3, 4, 15, 27*). However, the Lord forgave David but ruled that the child of David and Bathsheba must die, and so it did (*II Samuel, 12:14, 15, 18*).

The Lord instructs Moses to take the promised land and to utterly destroy its inhabitants.—

Deuteronomy, 7:

2. And when the Lord thy God shall deliver them before thee; thou shalt smite them, and utterly destroy them; thou shalt make no covenant with them, nor shew mercy unto them:

3. Neither shalt thou make marriages with them; thy daughter thou shalt not give unto his son, nor his daughter shalt thou take unto thy son.

6. For thou art an holy people unto the Lord thy God: The Lord thy God has chosen thee to be a special people unto himself, above all people that are upon the face of the earth.

It will be recalled how Joseph was carried to Egypt and how he made good there. When Joseph's father died in Egypt "—Joseph commanded his servants the physicians to embalm his father: and the physicians embalmed Israel." (*Genesis, 50:2*).

The date of the Exodus of Moses and the Hebrews from Egypt is not definite but it is

thought to have occurred during the reign of King Merneptah (c. 1292-1198 B.C.) of Egypt. According to the Old Testament, the Jews wandered in the wilderness for forty years. While on

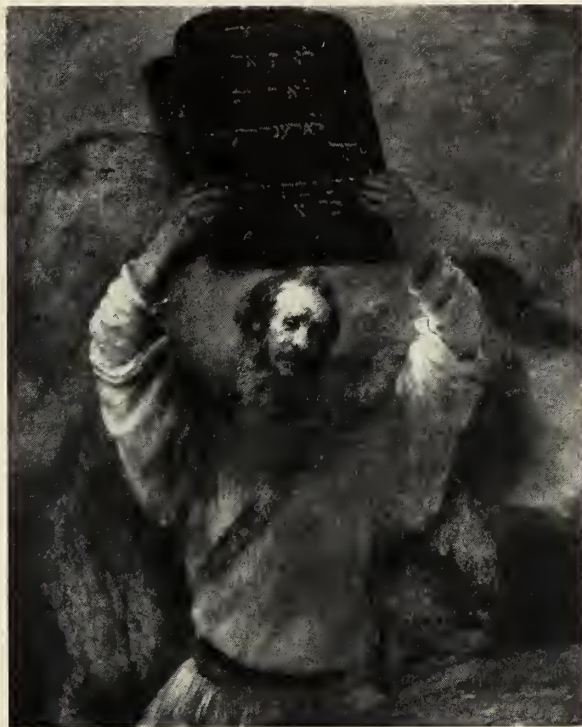


Fig. 2. *Moses Breaking the Two Stone Tables of the Law*, by Rembrandt.

God called Moses up on Mt. Sinai, "And He gave unto Moses when he had made an end of communing with him upon Mount Sinai, two tables of testimony, tables of stone, written with the finger of God" (*Exodus, 31:18*). But as Moses was on the mountain for forty days and forty nights, the people thought that he was not coming back. "... for as for this Moses, the man that brought us up out of the land of Egypt, we wot not what is become of him" (*Exodus, 32:1*). Consequently, they decided to return to their old gods. They made a golden calf and worshipped it. When Moses finally came down from Mt. Sinai; "And it came to pass, as soon as he came nigh unto the camp, that he saw the calf, and the dancing: and Moses' anger waxed hot, and he cast the tables out of his hands, and brake them beneath the mount" (*Exodus, 32:19*). Moses made short shrift of the backsliders; "... there fell of the people that day about three thousand men" (*Exodus, 32:28*). Later, the Lord replaced the tables of the law: "And the Lord said unto Moses, Hew thee two tables of stone like the first: and I will write upon these tables the words that were in the first tables, which thou breakest" (*Exodus, 34:1*). (Photograph of painting in Kaiser Friedrich Museum by Walter Steinkopf, Berlin, Germany.)

this trip the Lord called Moses upon the mountain Sinai and gave him the laws written upon two stone tablets. A study of these laws is essential in studying the culture of the ancient Hebrews. Some of these laws are quoted:

Exodus, 20:

2. I am the Lord thy God, which have brought thee out of the land of Egypt, out of the house of bondage.
3. Thou shalt have no other Gods before me.
4. Thou shalt not make unto thee any graven image,

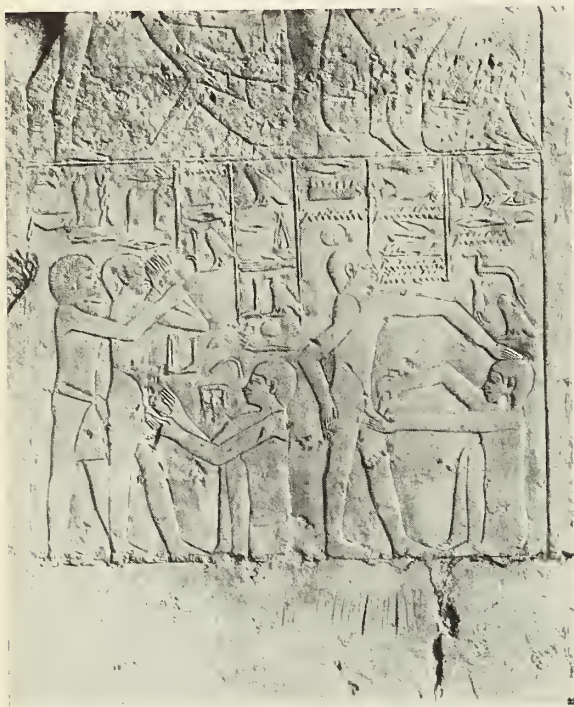


Fig. 3. Relief from the Necropolis of Sakkara Vth Dynasty. The lower part shows circumcision operation in progress. The upper part shows an operation on a man's foot and an operation on the back.

These operations were practiced by the Egyptians at least 2,000 years B.C. Concerning circumcision, Herodotus wrote: "... but further and more especially, on the circumstance that the Colchians, the Egyptians, and the Ethiopians, are the only nations who have practiced circumcision from the earliest times. The Phoenicians and the Syrians of Palestine themselves confess that they learned the custom of the Egyptians: and the Syrians who dwell about the rivers Thermodon and Parthenius, as well as their neighbors, the Macronians, say that they have recently adopted it from the Colchians." (Photograph obtained from the Wellcome Historical Medical Museum, London, England.)

or any likeness of anything that is in heaven above, or that is in the earth beneath, or that is in the water under the earth:

5. Thou shalt not bow down thyself to them, nor serve them; for I the Lord thy God am a jealous God, visiting the iniquity of the fathers upon the children unto the third and fourth generation of them that hate me;

6. And shewing mercy unto thousands of them that love me, and keep my commandments.

7. Thou shalt not take the name of the Lord thy God in vain; for the Lord will not hold him guiltless that taketh his name in vain.

8. Remember the sabbath day, to keep it holy.

9. Six days shalt thou labor, and do all thy work:

10. But the seventh day is the sabbath of the Lord thy God: in it thou shalt not do any work, thou, nor thy son, nor thy daughter, thy man servant, nor thy maid servant, nor thy cattle, nor thy stranger that is within thy gates:

11. For in six days the Lord made heaven and earth, the sea, and all that in them is, and rested the seventh day: wherefore the Lord blessed the Sabbath day, and hallowed it.

12. Honour thy father and thy mother: that thy days may be long upon the land which the Lord thy God giveth thee.

13. Thou shalt not kill.

14. Thou shalt not commit adultery.

15. Thou shalt not steal.

16. Thou shalt not bear false witness against thy neighbour.

17. Thou shalt not covet thy neighbour's house, thou shalt not covet thy neighbour's wife, nor his man servant, nor his maid servant, nor his ox, nor his ass, nor anything that is thy neighbour's.

Exodus, 21:

2. If thou buy an Hebrew servant, six years he shall serve: and in the seventh he shall go out free for nothing.

3. If he came in by himself, he shall go out by himself: if he were married, then, his wife shall go out with him.

4. If his master have given him a wife, and she have borne him sons or daughters; the wife and her children shall be her master's, and he shall go out by himself.

5. And if the servant shall plainly say, I love my master, my wife, and my children; I will not go free:

6. Then his master shall bring him unto the judges; he shall also bring him to the door, or unto the doorpost; and his master shall bore his ear with an aul; and he shall serve forever.

12. He that smiteth a man, so that he die, shall be surely put to death.

20. And if a man smite his servant, or his maid, with a rod, and he die under his hand; he shall be surely punished.

21. Notwithstanding, if he continue a day or two, he shall not be punished: for he is his money.

22. If men strive, and hurt a woman with child, so that her fruit depart from her, and yet no mischief follow: he shall be surely punished, according as the woman's husband will lay upon him; and he shall pay as the judges determine.

23. And if any mischief follow, then thou shalt give life for life.

24. Eye for eye, tooth for tooth, hand for hand, foot for foot,

25. Burning for burning, wound for wound, stripe for stripe.

26. And if a man smite the eye of his servant, or the eye of his maid, that it perish; he shall let him go free for his eye's sake.

28. If an ox gore a man or a woman, that they die: then the ox shall be surely stoned, and his flesh shall not be eaten; but the owner of the ox shall be quit.

Exodus, 22:

1. If a man shall steal an ox, or a sheep, and kill it, or sell it; he shall restore five oxen for an ox, and four sheep for a sheep.

16. And if a man entice a maid that is not betrothed, and lie with her, he shall surely endow her to be his wife.

17. If her father utterly refuse to give her unto him, he shall pay money according to the dowry of virgins.

18. Thou shalt not suffer a witch to live.

19. Whatsoever lieth with a beast shall surely be put to death.

21. Thou shalt neither vex a stranger, nor oppress him: for ye were strangers in the land of Egypt.

The Lord also gave the Jews detailed instructions as what to eat and what not to eat (*Leviticus*, 11), the purification of women after childbirth (*Leviticus*, 12), how to deal with leprosy (*Leviticus*, 13 and 14) and how men and women with discharges were to be cleansed by the priest (*Leviticus*, 15).

Some years later, a young Hebrew, Jesus Christ, attempted to soften the code of Moses. The Jews did not take kindly to this break with tradition and sacred teachings, so they killed him.

The penalty for adultery according to Moses.—

Leviticus, 20:10. And the man that committeth adultery with another man's wife, even he that committeth adultery with his neighbour's wife, the adulterer and the adulteress shall surely be put to death.

The penalty for adultery according to Jesus.—

St. John, 8:

3. And the scribes and Pharisees brought unto him a woman taken in adultery; and when they had set her in the midst,

4. They say unto him, Master, this woman was taken in adultery, in the very act.

5. Moses in the law commanded us, that such should be stoned: but what sayest thou?

6. This they said, tempting him, that they might have to accuse him. But Jesus stooped down, and with his finger wrote on the ground, as though He heard them not.

7. So when they continued asking him, he lifted up himself, and said unto them, He that is without sin among you, let him first cast a stone at her.

8. And again he stooped down, and wrote on the ground.

9. And they which heard it, being convicted by their own conscience, went out one by one, beginning at the eldest, even unto the last: and Jesus was left alone, and the woman standing in the midst.

The Law of Moses called for an eye for an eye.—

Leviticus, 24:20.

Breach for breach, eye for eye, tooth for tooth: as he

hath caused a blemish in a man, so shall it be done to him again.

But Jesus taught differently.—

St. Matthew, 5:

38. Ye have heard that it hath been said, An eye for an eye, and a tooth for a tooth:

39. But I say unto you, That ye resist not evil: but whosoever shall smite thee on thy right cheek, turn to him the other also.

Jesus also taught that necessary work should be done on the Sabbath Day (*St. Matthew*, 12:1-14), and that divorces shall not be allowed (*St. Matthew*, 19:3-10). These teachings also were opposed to the code of Moses.

Disease as a penalty for sin.—In the Old Testament, disease is considered to be a penalty for disobeying the Lord. When Moses pled with the Pharaoh to let the Hebrews leave Egypt, the Lord did certain things to show his power and to show whose side he was on. He first turned Moses' rod into a serpent (*Exodus*, 7:11), then he turned the river to blood, killing all of the fish (*Exodus*, 7:20, 21). Then the Lord did the following against the Egyptians: He sent a plague of frogs (*Exodus*, 8:6); the dust was turned into lice (*Exodus*, 8:17); He sent a swarm of flies (*Exodus* 8:24); He killed all of the cattle of the Egyptians (*Exodus*, 9:6); He caused boils to break out upon all of the Egyptians and their beasts (*Exodus*, 9:11); He sent a severe hail-storm which destroyed all the crops of the Egyptians (*Exodus*, 9:25); He sent a plague of locusts which ate every green thing (*Exodus*, 10:15); and finally killed the first born of every Egyptian, even the first born of the Pharaoh (*Exodus*, 12:29).

The Lord instructs Moses how to avoid disease.—

Exodus, 15:26:

And said, If thou wilt diligently hearken to the voice of the Lord thy God, and wilt do that which is right in his sight, and wilt give ear to his commandments, and keep all his statutes, I will put none of these diseases upon thee, which I have brought upon the Egyptians; for I am the Lord that healeth thee.

When Miriam and Aaron spoke against Moses because he had married an Ethiopian woman, the Lord turned them (Miriam and Aaron) into lepers so that their skin became "white as snow" (*Numbers*, 12:1). Later the Lord killed "fourteen thousand and seven hundred" of those who spoke

against Moses and Aaron (*Numbers*, 16:49). On one occasion, the Lord sent a pestilence upon Israel and laid low seventy thousand men (*II Samuel*, 24:15). When Sennacherib, King of As-



Fig. 4. *Hebrews Paying Tribute to the King of Assyria.*

This is a scene carved on a black stone shaft set up by the Assyrian King Shalmaneser, III in his palace on the Tigris River. In the upper panel, the Assyrian King, Shalmaneser, III, stands at the left with two attendants behind him. Before him is the winged sun-disk. The Hebrew's envoy is shown bowing to the King, while behind the envoy are two Assyrian officers leading a line of thirteen Hebrews (not shown here), bearing tribute for the King. (Photograph obtained from the British Museum.)

syria, attacked Jerusalem, the Lord destroyed his army and thus lifted the seige (*II Kings*, 19:35).

The taking of the promised land.—The Lord promised the Jews the Land of Canaan, but, unfortunately, this area had already been occupied by other peoples for a long period of time. The Jews probably felt about those people much the same as we felt about the Indians when we took their land away from them. One difference was that the people occupying the area of Palestine were much more civilized than the invading Jews while the Indians were in the stone age when Columbus came over.

The manner in which the Jews took the promised land and disposed of the inhabitants.—

Numbers, 31:

7. And they warred against the Midianites, as the Lord commanded Moses; and they slew all the males.

9. And the children of Israel took all the women of Midian captives, and their little ones, and took the spoil of all their cattle, and all their flocks, and all their goods.

10. And they burnt all their cities wherein they dwelt, and all their goodly castles, with fire.

15. And Moses said unto them, Have ye saved all the women alive?

17. Now therefore kill every male among the little ones, and kill every woman that hath known many by lying with him.

18. But all the women children, that have not known a man by lying with him, keep alive for yourselves.

The seizure of Palestine by the Jews required several years and they were never able to drive out all of the native peoples. They continued to war with these and especially the Philistines, their constant enemies. One recalls how Samson wished to marry the daughter of a Philistine. His parents took a rather dim view of this:

Judges, 14:3:

Then his father and his mother said unto him, Is there never a woman among the daughters of thy brethren, or among all my people, that thou goest to take a wife of the uncircumcised Philistines? and Samson said unto his father, Get her for me; for she pleaseth me well.

Samson would probably have done much better had he followed his parents' advice, as the courtship of the Philistine girl turned into a rather large affair with Samson slaying one thousand Philistines with "a new jawbone of an ass" (*Judges*, 15:15). The Philistines bribed Delilah to get him, and she did (*Judges*, 16:20). Then David made quite a name for himself by slaying the Philistine giant, Goliath (*I Samuel*, 17:49); he also secured a hundred foreskins of the Philistines as a dowry for the daughter of King Saul (*I Samuel*, 18:25).

Palestine, like so many countries, was divided into a north and a south. Northern Palestine was called Israel and was productive and rich, whereas southern Palestine, called Judah, was unproductive and poor. Saul, the first King of the Jews, (c. 1000 B.C.) was from the south (*I Samuel*, 10:24). After being defeated in battle by the Philistines, Saul committed suicide (*II Samuel*, 31:4), and David became king of Judah. After a number of battles between the north and south, David became king of Israel also (*II Samuel*, 5:3). David secured from Hiram, king of

Tyre in Phoenicia, cedars from Lebanon and skilled workmen to build himself a house (*I Chronicles*, 14:1). Evidently, at this time, there were no skilled craftsmen among the Jews.

After David, Solomon became king. He ac-

One of the very rare references to a physician in the Old Testament is the following:

II Chronicles, 16:12.

And Asa (king of Judah) in the thirty and ninth year of his reign was diseased in his feet, until his dis-



Fig. 5. *Christ Driving the Money-Changers from the Temple*, by El Greco. "And Jesus went into the Temple of God, and cast out all of them that sold and bought in the temple, and overthrew the tables of the money-changers, and the seats of them that sold doves. "And said unto them, It is written, My house shall be called the house of prayer; but ye have made it a den of thieves." (*St. Matthew*, 21:12, 13). (Photograph obtained from the Minneapolis Institute of Arts.)

cumulated great wealth and married the daughter of the Pharaoh of Egypt (*I Kings*, 3:1). He had forty thousand stables of horses for his chariots and twelve thousand horsemen (*I Kings*, 11:3). Solomon, like David, obtained cedar and skilled workmen from King Hiram and built a great church and house for himself and one for his wife, Pharaoh's daughter.

Solomon's extravagances (one can imagine the expense of feeding one thousand women) required increased taxation (*I Kings*, 9:15). This caused discontent among the Jews so when Solomon died, Jeroboam, who had been in exile in Egypt where King Shishak (Sheshonk) was ruling, returned to Palestine, and led a revolt of the north (Israel). Thus Palestine was again divided with Jeroboam being king of the north (Israel) and Rehoboam, king of the south (Judah).

ease was exceeding great: yet in his disease he sought not the Lord, but to the physicians. (He died anyway.)

Palestine, strategically located on the trade routes of the Near East, was controlled by first one great power and then another.

II Kings, 15:29.

In the days of Pekah, king of Israel came Tiglath-pileser, king of Assyria, and took Ijon, and Abelbeth-machah, and Janoah, and Kedesh, and Hazor, and Gilead, and Galilee, all the land of Naphtali, and carried them captive to Assyria.

In 722 B.C. Shalmaneser, King of Assyria, captured northern Palestine (Israel) and transported the Hebrews to the cities of the Medes (*II Kings*, 17). While around 700 B.C. Sennacherib, King of Assyria, raided southern Palestine (Judah) and carried off over 200,000 captives, it remained for Nebuchadnezzar, King of Babylon, in 586 B.C.,

to destroy Jerusalem and carry most of its inhabitants into captivity to Babylon. This completed the destruction of the Jewish state. In 538 B.C., King Cyrus of Persia captured Babylon and allowed those Jews who wanted to return to Palestine.

In the New Testament, healing is accomplished by faith.—

St. Matthew, 4:23:

And Jesus went about all Galilee, teaching in their synagogues, and preaching the gospel of the kingdom, and healing all manner of sickness and all manner of disease among the people.

Jesus was the great healer who healed all manner of sick people (*St. Matthew, 4:24*), who cleanseth the leper (*St. Matthew, 8:3*), who cured a soldier's servant of palsy without seeing him (*St. Matthew, 8:5-13*), and drove out devils (*St. Matthew, 8:16, 28-33*), who cureth the bloody issue (*St. Matthew, 9:20-22*), who raised Jairus' daughter from the dead (*St. Matthew, 9:24-26*), who restored sight to the blind (*St. Matthew, 9:28-31*).

Jesus cured where the physicians failed:

St. Mark, 5:

25. And a certain woman which had an issue of blood twelve years,

26. And had suffered many things of many physicians, and had spent all that she had, and nothing bettered, but rather grew worse.

27. When she had heard of Jesus, came in the press behind, and touched his garment.

28. For she said, If I may touch but his clothes, I shall be whole.

29. And straightway the fountain of her blood was dried up; and she felt in her body that she was healed of that plague.

It would appear that physicians did not play an important role in the community of the ancient Jews. They at least, however, did not receive the lambasting which Jesus gave the rich (*St. Matthew, 6:19, 19:16-25, 21:12-13*), the scribes and Pharisees (*St. Matthew, 23:1-29*), and the lawyers (*St. Luke, 11:46, 52*). In fact, one gets the impression that the physician was held in some respect. Apparently, Jesus not only taught the doctors but also learned something from them:

St. Luke, 2:

42. And when he was twelve years old, they went up to Jerusalem after the custom of the feast.

43. And when they had fulfilled the days, as they returned, the child Jesus tarried behind in Jerusalem; and Joseph and his mother knew not of it.

44. But they, supposing him to have been in the

company, went a day's journey; and they sought him among their kinsfolk and acquaintance.

45. And when they found him not, they turned back again to Jerusalem, seeking him.

46. And it came to pass, that after three days they found him in the temple, sitting in the midst of the doctors, both hearing them, and asking them questions.

Are not the teachings of Jesus summed up in the following story?

St. Matthew, 19:

16. And, behold, one came and said unto him, Good Master, what good thing shall I do, that I may have eternal life?

17. And he said unto him, Why callest thou me good? there is none good but one, that is, God: but if thou wilt enter into life, keep the commandments.

18. He saith unto him, Which? Jesus said, Thou shalt do no murder, Thou shalt not commit adultery, Thou shalt not steal, Thou shalt not bear false witness,

19. Honour thy father and thy mother: and, Thou shalt love thy neighbour as thyself.

20. The young man saith unto him, All these things have I kept from my youth up: what lack I yet?

21. Jesus said unto him, If thou wilt be perfect, go and sell that thou hast, and give to the poor, and thou shalt have treasure in heaven: and come and follow me.

22. But when the young man heard that saying, he went away sorrowful: for he had great possessions.

23. Then said Jesus unto his disciples, Verily, I say unto you, That a rich man shall hardly enter into the kingdom of heaven.

24. And again I say unto you, It is easier for a camel to go through the eye of a needle, than for a rich man to enter into the kingdom of God.

Conclusion

The literature of the ancient Jews gives us an extremely fascinating account of how they lived and what they thought about in those days. With this in mind, a more extensive study of the Bible is recommended. Along with other primitive peoples, the ancient Jews regarded disease and other misfortunes as punishment by their God for sin. Certain illnesses were attributed to the possession of devils. Healing was accomplished through faith. It has been shown that the Hebrews borrowed many ideas from the older and more cultured civilizations, the Babylonian and the Egyptian.

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(Continued on Page 534)

Acute Pancreatitis

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THE WIDESPREAD use of serum pancreatic enzyme determinations and greater awareness on the part of physicians have led to increased frequency of recognition of acute pancreatitis. With this has come heightened interest in the disease. It is now appreciated that the disorder occurs in two principal forms: (1) an acute edematous or interstitial variety; and (2) a more serious and severe acute hemorrhagic or necrotic variety. Sharp clinical distinction between these two types is difficult and often impossible, particularly in the early stages. The principles of treatment, however, are the same in both types. Basic management is also the same whether the process is an isolated acute primary episode, an acute recurrence, or an acute exacerbation of chronic relapsing pancreatitis.

The discussion to be presented has been constructed with the foregoing considerations in mind. It is not intended as an exhaustive review of the subject, but rather as a digest of some of the salient features of the diagnosis and management of acute pancreatitis.

Predisposing Factors

Two things have emerged as important precursors, concomitants, or associates of acute pancreatitis. One is biliary tract disease and the other is excessive indulgence in alcohol.¹ It is common to obtain a history of excessive ingestion of alcohol, accompanied often by a heavy meal, shortly before the onset of acute pancreatitis. One other factor whose etiologic importance has come to be appreciated more in recent years is surgically induced trauma to the gland, its blood supply, or its ducts.² The development of pain, fever, or signs of peritoneal irritation or inflammation in the period immediately following a surgical procedure in the upper abdomen should arouse suspicion of complicating postoperative acute pancreatitis.

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Diagnosis

Symptoms and Signs.—The outstanding symptom of acute pancreatitis is *pain*. This ordinarily is severe and steady in character. In some cases, however, it is described as somewhat intermittent. It is usually prolonged and tends to be resistant to opiates. It is situated most often in the epigastrium but may be located in other areas, depending on the portion of the pancreas that is primarily affected and on whether or not parietal structures have been involved. Radiation of pain to the back is common. Characteristic of pain of pancreatic origin is assumption by the patient of certain postures to obtain relief. These typically involve bending over or leaning forward, often with the hand pressed against the abdomen.

Jaundice is an important sign. Compression of the common duct by an inflamed and swollen pancreas may be responsible, but it has been the experience of several observers that overt jaundice is seen most often in patients who have concomitant or associated biliary tract disease.¹ The occurrence of jaundice, therefore, should alert one to the possibility of coexisting biliary tract disease. Still another mechanism that may be operative in some cases is pronounced intrahepatic pericholangitis. This has been observed in some jaundiced dogs with experimentally induced acute pancreatitis.³ It remains to be determined, however, whether a similar change occurs in human cases of acute pancreatitis and, if it does, whether the severity is ever such as to account for jaundice.

Shock, with cold, clammy skin, rapid pulse and marked lowering of the blood pressure, is popularly considered to be a feature of acute pancreatitis. Bluish, greenish or ecchymotic discoloration of the skin in the flank (*Grey Turner's Sign*) or about the umbilicus (*Cullen's Sign*) is also popularly associated with acute pancreatitis. While shock and skin changes of the variety described are classical findings, they are seen relatively infrequently in patients with acute pancreatitis.^{1,4} When they occur they may be taken as evidence pointing to pancreatic necrosis and hemorrhage.

Abdominal signs in acute pancreatitis are

worthy of note because they have many similarities and also differences from other inflammatory conditions in the upper abdomen. *Abdominal distention* is fairly common. The abdominal wall may be soft or show variable degrees of *muscle guarding*. True *muscle rigidity*, however, is uncommon. *Tenderness* is commonplace and ordinarily is most pronounced over the area of maximal pain. *Peristaltic sounds* may be unaltered, reduced or completely absent, depending on the degree and extent of ileus.

Pulmonary signs may be noted on one or the other or even on both sides of the chest. These include rales, impaired transmission of breath sounds, friction rub and occasionally signs of pleural effusion. The fact that such changes are encountered not infrequently in cases of acute pancreatitis deserves particular mention because their detection may divert attention to the supradiaphragmatic area and cause confusion in diagnosis.

Laboratory Findings.—The outstanding laboratory test used to diagnose acute pancreatitis is determination of *serum amylase*. To this determination should be added that of *serum lipase*. These enzymes do not always behave in a predictable fashion and the values for each may be discrepant. It is always wise, therefore, to determine the concentrations of both enzymes and to repeat the determinations serially if at all possible. The height of the rise in pancreatic enzymes in the serum is not a reliable estimate of the degree of inflammation or of the presence or absence of necrosis of the pancreas. Nor is there a close correlation between the height of the serum amylase, for example, and the clinical signs of toxicity. On the other hand, the degree of elevation may have diagnostic importance. Bockus and his associates have pointed out that levels of serum amylase or lipase exceeding five times the top normal level provide fairly reliable evidence of primary acute pancreatitis.⁵ Determinations of serum pancreatic enzyme concentrations are subject, however, to certain limitations in interpretation which deserve to be emphasized.

The concentration of amylase and lipase in the serum will vary depending on the time the determinations are made after the onset of the disease. Serum amylase generally tends to rise and attain its maximal level within twelve to twenty-four hours after the onset of the disease. Ordinarily, the values return to normal within three or four

days. Serum lipase, on the other hand, shows its maximal rise a little later than serum amylase and tends to remain elevated a bit longer. Should the patient first be seen beyond the period of maximal rise, or should the determinations not be made until several days after the onset of disease, normal values may be obtained. Contrariwise, if the inflammatory process is so severe as to result in extensive destruction of the pancreas, the remnant acinar cells may not be able to produce enough amylase or lipase to elevate the concentration of these enzymes in the peripheral blood. In such circumstances, one may be confronted with serious, severe and extensive pancreatic necrosis in a patient with entirely normal, perhaps even less than normal, concentrations of serum amylase and lipase.

Prior injection of opiates may influence the level of serum pancreatic enzymes, and this too must be borne in mind. It has been demonstrated by several investigators that the administration of opiates, even of codeine, may result in some instances in significant elevation of serum amylase and lipase.⁶ Indeed, these elevations may persist for as long as twenty-four hours. Since most patients with acute pancreatitis are seen at home, and since pain is the outstanding symptom, an opiate or analgesic is usually given. When the patient is subsequently admitted to the hospital, it must be considered that elevation noted in serum amylase or lipase may not be truly representative of the process within the pancreas *per se* but may be a reflection in part of a previously administered opiate.

Interference with excretion due to impaired renal function may be responsible for heightened or sustained elevation in the level of serum amylase. This factor acquires importance in acute pancreatitis because renal impairment is commonplace in this condition.⁷

Elevation in serum amylase and lipase may also occur in disorders from which acute pancreatitis must be differentiated. These include such conditions as free anterior perforation of duodenal ulcer, intestinal obstruction and peritonitis due to various causes.

Urinary diastase has largely been abandoned because of the considerable variation in results. Examination of *peritoneal fluid* for amylase is valuable because the concentration of amylase in this material may not only be hypernormal but may persist above normal for periods of from two to

four days longer than in the blood.⁸ The same situation obtains with pleural fluid developing in association with acute pancreatitis.

Hyperglycemia and *glycosuria* are commonly noted in patients with acute pancreatitis.⁹ The disturbance in carbohydrate metabolism reflected in these findings is usually transient but in some cases may persist with diabetes mellitus ensuing as an aftermath of acute pancreatitis.

The concentration of *serum calcium* is frequently lowered in the acute phase of pancreatitis.¹⁰ This occurs as a rule between the second and fifth days and may persist for as long as two weeks. The lowering results primarily from withdrawal of calcium from the blood into areas of fat necrosis where the calcium combines with liberated fatty acids to form soaps. Since the amount of calcium withdrawn from the blood depends largely on the degree and extent of fat hydrolysis, the degree of lowering of serum calcium concentration is a measure of the severity of the process and the degree of fat necrosis. The lowest levels of serum calcium occur in cases of pancreatic necrosis with levels of 7.5 mg. per cent or less pointing to the possibility of fatal outcome.¹¹

Alterations in some of the factors responsible for coagulation of blood may be utilized as a means of detecting acute pancreatitis. One measure that has received much attention is the *antithrombin titer*.¹² This has been shown to be elevated in acute pancreatitis. It is said to have the additional advantage of remaining elevated throughout the acute phase of the disease. However, many investigators, including my associates and myself, have not been successful with the use of this test.

I would like to call attention to *serum alkaline phosphatase* as another laboratory test of possible value in the diagnosis of acute pancreatitis. Elevations in serum alkaline phosphatase without concomitant hyperbilirubinemia have been observed to occur in dogs with experimentally induced acute pancreatitis.³ Whether or not acute pancreatitis as seen in man is regularly or frequently accompanied by elevation in serum alkaline phosphatase without coincident hyperbilirubinemia remains to be determined. There would seem to be good reason, nevertheless, to include serum alkaline phosphatase among the chemical determinations to be made in patients suspected of having acute pancreatitis.

Roentgen Findings.—Roentgen examination of the chest may demonstrate pneumonitis, pleuritis,

effusion, atelectasis or elevation of the diaphragm. A scout film of the abdomen may show any one of several patterns of gas distribution in the intestine.¹³ These are most apt to be seen in roentgenograms taken between twelve and forty-eight hours after the onset of pain. The patterns vary from localized ileus with a so-called sentinel loop of distended and gas-filled small bowel in the upper abdomen, to generalized ileus. Concomitant disease in the biliary tract may be disclosed by the presence of radiopaque biliary calculi. This examination may also serve to confirm the existence of pancreatic disease by demonstrating calcification within the pancreas.

After subsidence of the acute phase, or in the early convalescent phase, barium may be given by mouth and the upper gastrointestinal tract studied. This may disclose the presence of a space-taking lesion within the pancreas manifested by displacement of neighboring segments of the upper gastrointestinal tract and/or alterations in the mucosa of the stomach or duodenum.

Cholecystography merits special mention since this examination is commonly elected as a means of study of a patient with upper abdominal pain. The point to be emphasized is that cholecystograms done by the oral method, and even by the intravenous method, in the presence of acute pancreatitis may fail to visualize the gall bladder.¹⁴ In the absence of intrinsic gall-bladder disease this is only a temporary and transient alteration; the gall bladder in such cases usually can be satisfactorily demonstrated by cholecystography within a month after subsidence of the symptoms of acute pancreatitis. Hence, one must be alert to the possibility of misinterpreting the unvisualized gall bladder in cholecystographic studies conducted in the presence of acute pancreatitis.

Intravenous cholangiography, performed when there is no jaundice and when liver function is unimpaired, may successfully visualize the ducts. Calculi may be disclosed in the common duct. Theoretically, at least, this examination may also show narrowing and obstruction of the distal end of the common duct and perhaps, on occasion, reflux of contrast material into the pancreatic duct.

Electrocardiography.—This examination deserves mention because it is often used to help distinguish between acute pancreatitis and myocardial infarction, disorders which frequently resemble each other in their clinical manifestations. Alter-

ations are not uncommonly seen in the electrocardiograms of patients with acute pancreatitis.^{4,5} Such changes as may occur are ordinarily transient and nonspecific and may be related to electrolyte alterations. One may be hard pressed sometimes, however, to distinguish clearly and precisely from the electrocardiographic tracing alone between myocardial infarction and acute pancreatitis.¹

Treatment

Majority opinion today favors conservative non-operative management of acute pancreatitis.^{16,17} Surgical intervention is reserved for those cases in which diagnosis is uncertain and those with serious complications developing while being managed conservatively.

A major objective of conservative management is to *relieve pain*. This may be accomplished through the use of drugs, such as the nitrites, which relax smooth muscle. Counterbalancing this action on the part of the nitrites are the transient nature of the relaxing effect and the threat of hypotension. Opiates and related synthetic analgesics are much more effective pain relievers. A word of warning should be sounded about the use of morphine. While this drug may effectively relieve pain it may contribute to worsening of the local condition because of its spasmogenic action. The latter induces spasm of the choledochal sphincter, the pancreatic ducts and the duodenal musculature. Demerol is perhaps the analgesic of choice, not because it is without spasmogenic effect, but because ductal and duodenal spasm resulting from its use is less pronounced and less persistent than that following morphine. Drugs which interfere with neural transmission through their action principally as autonomic ganglionic blockaders (such as tetraethylammonium (Etamon) chloride and hexamethonium (Bistrium) bromide), or as parasympatholytic agents as well as ganglionic blockaders (such as methantheline (Banthine) bromide and allied compounds), or as parasympathetic depressants (such as atropine) may also relieve pain in acute pancreatitis. Pain relief following the use of these drugs probably results from reduction of motility and tone in the musculature of the upper gastrointestinal tract and the ducts, together with diminution in gastric and pancreatic secretion. The decrease in gastric secretion reduces stimulation of pancreatic secretion by secretin, a hormone released when hydrochloric acid comes in contact

with the mucosa of the small intestine. Intravenously administered procaine has also been used to relieve pain, but since this is attended by some dangers its use has not gained popular acceptance.

In the event that the use of the various drugs mentioned is ineffective in relieving pain, one may resort to nerve blocking procedures. These include splanchnic block, paravertebral sympathetic block and fractional epidural block. My associates and I have found the latter procedure especially effective.¹⁸

The technique we employ consists of introducing a fine catheter into the epidural space between vertebra L-1 and L-2. The catheter is then passed upward until its tip comes to lie between vertebra T-5 and T-6. This corresponds with neural segment T-8, which is about the center of the nerve supply to the pancreas. A solution of procaine or a similar local anesthetic is then introduced. The anesthetic solution by diffusing up and down from T-8 affects the important neural segments innervating the pancreas. The indwelling catheter in the epidural space may be maintained for as long as a week with instillations of anesthetic solution being made as often as necessary. While pain control is excellent, it has been our impression that the procedure does not significantly influence the disease process itself.

The second major objective of conservative management is to *combat shock and restore fluid and electrolyte balance*. This involves the use of fluids such as saline, glucose, lactated Ringer's and Darrow's solutions, plasma, blood and albumin. Human serum albumin appears to be strikingly effective in the management of patients of acute pancreatitis.¹⁹ Its effectiveness seems attributable more to its ability to restore plasma loss than to any possible antitryptic action it may possess. Glucose solutions should be used with care because of the disturbance in carbohydrate metabolism that occurs so commonly in acute pancreatitis. The latter may require the use of insulin. Insulin should be used cautiously, however, to avoid hypoglycemia which is vagotonic. Calcium is often required because of the tendency for serum calcium to be lowered. Disturbances in sodium, potassium and chloride must be corrected as indicated and require close attention. Care should be exercised particularly in the administration of potassium, because of the possibility of accompanying renal impairment.

The third major objective of conservative treat-

ment is to reduce pancreatic secretory activity. This is done chiefly by withholding all food and drink and by inserting a nasogastric tube to which constant suction is applied. The purpose of the latter is to remove all gastric contents and thereby prevent hydrochloric acid from entering the duodenum and provoking hormonal stimulation of pancreatic secretion. Nervous influences are combatted by the use of sedatives, vagal depressants and ganglionic blockaders as mentioned earlier. External roentgen radiation has also been used in animals²⁰ and in man²¹ to diminish pancreatic secretion, but since the effects are still not altogether known this form of management is not widely used.

The fourth major objective is to combat infection and peritonitis. Broad spectrum antibiotics that are well concentrated in the bile and are effective against the bacterial flora of the intestine, are the drugs of choice. They are preferably given by mouth but may have to be given intravenously or intramuscularly because of nausea and vomiting or because of the constant gastric suction that is applied.

Additional therapeutic measures may be mentioned even though some of them are still largely in the experimental stage. Soy bean extract containing a *trypsin inhibitor* has been employed in dogs^{22,23} on the basis of the theory that much of the ill effects of acute pancreatitis stems from the diffusion of trypsin from the pancreas into the systemic circulation. The results in dogs thus far have been varied. *Carbonic anhydrase inhibitor* (Diamox) has been used in dogs and more recently in man.²⁴ It has been demonstrated that the drug is capable of diminishing volume and bicarbonate content of pancreatic secretion. This material gives promise as a useful agent to reduce pancreatic secretion. *Lipase inhibitors*, more especially quinine²⁵ and sodium formaldehyde sulfoxalate,²⁶ have been shown in dogs to counteract fat necrosis induced by experimental methods. Whether these will come to have clinical value remains to be determined. Finally, *cortisone and hydrocortisone* have been reported to have been used in some instances of acute pancreatitis with beneficial effect.^{17,27,29}

The conservative regimen should be continued until all signs of inflammation have subsided. The diet is then increased cautiously until the patient is able to eat and tolerate a low fat, high protein, high carbohydrate diet. At this time studies are

undertaken designed to disclose associated biliary tract disease, residual pancreatic cysts, and other complications. Elective surgery designed to correct such abnormalities as may be found may be done at this time. Lastly, the patient is cautioned that the chance of recurrence is good and that to help avoid recurrence or future distress, overeating and the use of alcohol should be avoided.

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Development in Prepayment Plans

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SECURITY is an important word to Americans. To most of us, its achievement is the main goal in our lives. But it has become more meaningful and has assumed a greater significance since the early thirties when the depression struck our country a cruel and hard blow. Shortly after that financial nightmare, we picked up the threads of our economic system and rewove them to create a more prosperous future. We sought security. It was our main worry and concern. Without it, we faced a turmoil, similar to the one through which we had just passed, with all its poverty, misery and unemployment.

Security, to the individual and to the Nation, as we all know, is based to a very large degree on health. During the depression, hospitals and doctors, while receiving little or no reward for their work, had to bear the burden of providing medical care. The depression, proposals for Federal compulsory health insurance, the scarcity of money to pay medical bills during those years, all had their effect as had the action of your Michigan State Medical Society, in fostering the organization of Blue Cross and Blue Shield and other prepayment methods.

We saw our weaknesses in those dark days and we prepared to remedy them. The result has been that the trend in financing health care has been more and more toward prepayment through voluntary methods, the Blue Cross and Blue Shield Plans and the insurance companies. The trend has been away from compulsory health insurance. Indeed, there has also been a trend to greater participation by the Government in the financing of health care for certain categories of its wards and indigents. Statistics and opinions expressed by informed, responsible persons support these statements.

In Seattle, last November, Dr. Elmer Hess, at the American Medical Association clinical meeting, said: "Today's professional freedom to be a private practitioner of medicine instead of a slave of

Government is due solely to Blue Shield—the physician's answer to socialized medicine."

Even some of the most rabid proponents of Federal compulsory health insurance have recently admitted that voluntary methods have been an effective alternative and obstacle to enactment of their proposals. The trend can be demonstrated statistically by the growth in Michigan of Blue Shield which, since its beginning, as one of the first such plans, has grown to provide coverage for nearly half the population of the State, and in 1956 paid physicians approximately 41 millions of dollars for 1,212,873 individual services for subscribers.

The trend toward the participation by Government in costs of health care is most apparent in the recently established "Medicare" program for care of dependents of members of our armed forces and in the Welfare Act of 1956 which will put the Federal Government into business with the States in financing of care of four categories of indigents. Anyone who is sufficiently interested can review the trends by studying available literature and statistical material. It is not impossible to ascertain, to a reasonable extent, what we might refer to as the current, or today's trend.

There is another trend, in spite of all that has been accomplished (and perhaps, to a great extent, because of what has been done) and this appears to be an increasing discontent with the present quality and quantity of prepayment methods. These signs of dissatisfaction are readily apparent if you have, and will take, the time to observe them. They may require considerable evaluation and appraisal, but the evaluation will reveal that the trend is toward broader, more comprehensive coverage as to types of services covered.

There is certainly a trend toward efforts to control costs of care; to eliminate charges beyond the provisions of prepayment, to control abusive utilization of benefits by such as unnecessary hospitalization, unnecessary diagnostic and surgical procedures. An interesting and indicative state-

Presented at the Mt. Carmel Mercy Hospital, Annual Clinic Day, January 30, 1957.

ment was given in the *AFL-CIO News*, December 22, 1956, by Morris Brand, M.D.

Dr. Brand stated that since Congress has not enacted legislation to set up a national insurance program—which most labor unions favor—unions have had to find other sources of health insurance coverage for their members, mainly Blue Cross-Blue Shield and commercial carriers.

However, Dr. Brand continues, since home and office care is rarely offered in these plans, some “labor groups have established direct service medical centers where services are actually provided rather than cash indemnities to cover part of the costs. The latter type of plan has proven more popular with members because there are no barriers to the service, preventive services are usually included in the benefits and there are no hidden bills cropping up after the services are rendered.”

In general, Dr. Brand believes that:

“The extent to which commonly available insurance programs meet a family’s health needs is not too impressive to Labor. . . . Indemnity patients are not a satisfactory method of paying for services and are a base upon which some physicians too frequently add substantial charges. Also the emphasis on hospital and surgical coverage as in the case of most plans without substantial out-patient benefits is frequently a cause for unnecessary hospitalization. Also, as a result of inadequate concern for operating efficiency in hospitals and an *unwillingness to enforce legitimate controls*, there are unjustified premium increases.”

According to Dr. Brand, these are Labor’s goals for better health plans:

1. Complete prepayment for medical care without co-insurance and deductible features and hidden added costs.
2. Comprehensive benefits—only if the range of health services is complete will the individual’s health needs be effectively and economically met.
3. Rational organization of medical services—on the basis of group practice, and
4. *Control* of the quality of medical services which must be built into medical care plans.”

A representative of organized medicine, Ralph T. Ogden, M.D., President of the Connecticut State Medical Society in the *Journal* of that Society says:

“The voluntary health insurance plans, which provide benefits only when they are received in a hospital,” are largely responsible for the present acute shortage of hospital beds. On the Presidents Page of the

Connecticut State Medical Journal, he stated that many people “are hospitalized today for diagnostic and therapeutic purposes only because they possess prepaid health insurance which will pay for benefits under no other circumstances. These ambulatory people are occupying beds that should be available only for the sick. . . .”

Dr. Ogden does not feel that the answer to this dilemma lies in building new hospitals or expanding present facilities.

“A more effective answer would be a change in policy of the voluntary health insurance plans which would provide payments for medical services regardless of where carried out, providing that *safeguards against abuse and exploitation* could be assured. The medical profession, the Hospital Association, Blue Cross, Blue Shield, and all other health insurance agencies should get together and develop a program that would pay for medical services when rendered in private offices or as patients of private physicians in the out-patient departments of hospitals.”

Dr. Ogden further urges physicians to support and recommend “ways and means whereby the comparatively well patient may get the diagnostic and therapeutic benefits of his health plan without occupying a bed in a hospital. Every effort should be made . . . to eliminate the hospital waiting list as quickly as possible.”

Having sponsored and encouraged voluntary plans as its answer to problems of financing health care, there is an understandable trend toward holding the medical profession responsible for the conduct and results of voluntary prepayment. I will repeat, Dr. Brand, in his statement said it in this manner: “Also, as a result of inadequate concern for operating efficiency in hospitals and an unwillingness to enforce legitimate controls, there are unjustified premium increases.”

The Wisconsin Physicians Service, a part of the Wisconsin State Medical Society, recently in its *State Journal* said this:

“For while most people will have implicit confidence in a health insurance program approved by the medical profession, there is always the possibility that some may think ‘the Doctors’ Plan’ is designed primarily to benefit the doctor, rather than the patient.”

I doubt that it is necessary to remind this audience of the attitude of representatives of large groups of subscribers to Michigan’s Blue Cross and Blue Shield. The daily press, not so long ago, was full of it. The hospitals and doctors were charged with taking advantage of the exist-

ence of the Plans and of refusing or neglecting to accept responsibility for controlling abuses.

A Commission was appointed by the Governor, as a result of these charges, to make an investigation which is still being carried out. Since then, the UAW-CIO has announced its intention of organizing a prepayment plan which presumably will employ groups of physicians on a salary or capitation basis in order to control improper utilization, costs and provide a wider scope of services. It has been clearly demonstrated that, at least in part, it is hoped that this plan will result in assumption and exercise of responsibility and control of abuses of Blue Cross, Blue Shield and insurance on the part of the sponsoring hospitals and doctors.

The demands for expanded and extended benefits under Blue Shield have not only been voiced by organized labor. Similar attitudes are expressed by employers, many of whom pay all or a large part of the cost of protection; by many doctors who have no hospital affiliation or would prefer to render in their offices some services such as minor surgery, diagnostic procedures, etc.; and by those hospitals equipped to provide many of these services on an out-patient basis.

Admittedly, your Michigan Blue Shield Plan has provided, until now, little other than care for hospitalized subscribers. The Board of Directors and the management of Michigan Medical Service are anxious to provide all the benefits which can safely be offered on a sound actuarial basis, without detriment to quality of care.

Our subscribers are asked to pay a fair and reasonable rate for the benefits which they are offered. But if members ask MMS to defray the cost of unnecessary procedures and the abuse of their contract, it is evident that the rate cannot be reasonable. Our subscribers will consider our rate unreasonable if, when entitled by the terms of our contracts to service benefits, they are charged fees over and above our payments to physicians which have been established by the physicians themselves. It is also difficult to justify our program when, in a particular community, our subscribers have difficulty finding physicians who participate in Blue Shield.

If voluntary plans are medicine's answer to problems in financing medical care costs, then the Profession must make the plans work.

Dr. Hess, at Seattle, also said:

"Since we have accepted the insurance principle, many patients who previously would be non-paying patients have had their bills at least partially paid, and I am rather intolerant of the physician who is not a participating member of Blue Shield and who complains when Blue Shield pays the patient and not him directly. I also am intolerant of the physician who in defense of his attitude in not being a participating member, says with a loud voice: 'Nobody is going to tell me what to charge'."

Michigan State Medical Society membership now totals around 6,000 doctors of whom about 4,800 are engaged in the active practice of medicine. Approximately half of the latter group started their practice after the depression years, without the experience of practicing in an atmosphere devoid of a voluntary prepayment medical care plan. This lack of personal experience with the kind of economic problems that gnawed at medical practice in the depression years may, in part, account for the negative attitude towards prepaid medical care demonstrated by some of these men.

These are the men who take for granted the benefits of Blue Shield, who regard it as merely a collection agency, who do nothing positive to further its cause, who quarrel about its limitations or even question the need for its existence.

No one can deny Blue Shield's role in improving the over-all economic situation of physicians in Michigan. Contrast the average physician's income in the 1930's, when he rarely grossed \$5,000 per year, with his situation today. In 1955, MMS paid out to 6,237 physicians a total of \$31,883,215.00. On the average, that would be a little over \$5,100 each. In 1956, almost \$42,000,000.00 was paid out. Obviously on an individual basis, many received far more than that average, many far less. Nevertheless, it is an imposing picture. And this, remember, is income from Blue Shield alone and just a portion of the physician's total income.

Trends, in financing health care, as in every other field, don't just happen. Trends are the result of action and reaction by someone or something. The trends we've experienced in prepayment are, in part, the result of actions long before Michigan Medical Service was conceived, and since.

Natural competition, too, between the non-profit plans and the insurance companies has tremendously affected the trends. The develop-

ment of closed panel and group practice plans has had an effect and will have more. And what Blue Shield and Blue Cross do now and in the future will have much to do with establishing the trend.

What influence your Blue Shield Plan will exert in the future will depend on what you, collectively, want of it; direct it to do; and the degree to which you support its efforts. Blue Shield itself, as a separate entity, can do nothing. Blue Shield was created by your Michigan State Medical Society, is responsible to, and is the responsibility of organized medicine. Blue Shield must have direction; it must know the attitude and the policy of a united medical profession.

The medical profession must speak as one, direct as one, and act as one. It is not sufficient that the profession express itself critically and with many voices. We are unable to completely satisfy fifty-four County Medical Societies and eighteen or nineteen different specialty groups with sometimes opposing views. The Profession must communicate with all segments, all the many specialty groups, all the components, all the individual physicians. It must consider all the varied interests, evaluate all the special problems. It must agree, compromise, and reach decision. It must then direct and support united action in behalf of all the profession. Medicine needs intelligence, communication, organization and authority in this field.

Dr. Dwight Murray, at Seattle two months ago, in his presidential address, warned:

"No nation can merely reap the benefits of freedom; it must also sow the seeds of freedom. In medicine the situation is the same. If an apathetic profession takes its freedom for granted, it will be the beginning of the end. . . ."

"The day has come, gentlemen," Dr. Murray continued, "when we can no longer look upon medical economics and social changes merely as issues to be considered during our limited leisure hours. . . . We must now pay daily attention to these matters. . . . They must be a vital part of our life."

Perhaps you've assumed that the past success of your Blue Shield-Blue Cross and other voluntary prepayment plans in forestalling enactment of compulsory health insurance should have been enough. Perhaps you feel that you should be left alone to enjoy the "status quo" or even return to the old days. However, trends have a way of continually advancing, changing direction and of being influenced by action and reaction.

Trends are set by public opinion and favor, and their courses can be altered as rapidly as they are made. As a result, we must not be indifferent to them. Instead, we must always concern ourselves with the inevitable changes that will occur as we advance into the future.

Our philosophy must be to make honest effort toward improvement by recognizing those changes and exploiting them to our advantage. And our purpose should find its aim and its effect in the betterment of mankind.

ACUTE PANCREATITIS

(Continued from Page 493)

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St. Luke's Hospital Clinico-Pathologic Conference

Edited by Chandler Smith, M.D.
Saginaw, Michigan

THE PATIENT was a white man, forty-three years old, who experienced an illness of twelve years' duration. The onset was heralded by a fall from which he sustained several fractured ribs on the left side. At that time he first noticed a firm mass below the left costal margin. Over the ensuing years this mass receded and reappeared so that its presence was intermittent. The patient consulted a physician nine years after the onset of this illness and the mass was again noted. Radiographic examination of the upper gastrointestinal tract was said to be normal. The patient experienced discomfort over the left upper abdominal quadrant but continued to work. One year before admission to the hospital he was thought to have had a heart attack and subsequently remained at home for several months. During that time, he experienced some pain and a sensation of pressure over the left upper abdominal quadrant that radiated to the left shoulder. Pain did not extend down the left arm. The patient resumed work two weeks before entering the hospital and shortly thereafter first noticed swelling of the abdomen and blue discoloration of the peri-umbilical skin. During the past six months there had been increasing shortness of breath. The patient denied decreased appetite or loss of weight but volunteered that his face had become thin. There had been no hemoptysis, hematemesis, melena, or black viscid stools. Bowel movements had been normal. The patient denied the use of alcoholic beverages. The past history was not contributory.

Physical examination revealed a markedly emaciated white man in no acute distress. The temperature was 99.0 degrees (F.), pulse 80, respirations 14 and blood pressure 135/90 mm. Hg. The skin was clear without discoloration or "spider angiomas." The eyes were sunken and the pupils were round and equal, reacting promptly to light and accommodation. The sclerae were white and the conjunctivae were pallid. The neck was supple and cervical lymph nodes were not enlarged. Auscultation of the chest revealed normal breath sounds and elevation of the

diaphragm on both sides. The heart was not enlarged, the rhythm was regular, and the valve sounds were normal. The abdomen was soft and markedly distended. Subcutaneous hemorrhage discolored the skin about the umbilicus, over an area that measured approximately 12 cm. in diameter. A distinct fluid wave was elicited. Tenderness was limited to the left upper quadrant where palpation revealed the splenic edge 6 cm. below the costal margin. The surface felt smooth, the texture was firm, and the margin was blunt. The liver was not palpable. Auscultation revealed faint bowel sounds that were otherwise not remarkable. The external genitalia were normal. Rectal examination disclosed slight soft symmetrical enlargement of the prostate. There was no induration of the rectal shelf. The extremities were normal except for slight pitting edema of the right lower leg. There was no palmar erythema. The modalities of neurologic function were normal.

Urinalysis was not remarkable. Hematologic examination revealed 10.1 grams of hemoglobin per 100 cc. There were 3,300,000 erythrocytes and 8,500 leukocytes per cu. mm. Differential count of 100 cells revealed sixty-seven segmented granulocytes, three band cells, twenty-nine lymphocytes, and one eosinophil. The nonprotein nitrogen was 47 mg. per 100 cc. The fasting blood sugar was 114 mg. per 100 cc. The icterus index was 4.8 units. The total serum protein was 5.05 grams with 3.25 grams albumin and 2.8 grams globulin. Bromsulphalein excretion was normal. There was three plus flocculation of cephalin after twenty-four and forty-eight hours. The serum prothrombin content was 90 per cent. The Kahn serologic test for syphilis was negative. Stool examination revealed only a trace of gross blood. Radiographic examination of the chest revealed elevated diaphragmatic domes that were smooth and regular. The lung fields and costophrenic angles were clear and the cardiac contour was not remarkable.

After eighteen days in the hospital the abdomen was explored. The operative report states that,

"many, many quarts of blood tinged, ascitic fluid were aspirated." Laboratory examination of that fluid revealed a specific gravity of 1.021. No tumor cells were identified. The peritoneum was smooth and glistening. The liver appeared normal with smooth surface and sharp margin. The spleen was markedly enlarged and extended medially to the midline and inferiorly to a point midway between the xiphoid process and the left anterior superior iliac spine. The anterior surface was smooth and dark bluish red. The posterior surface was firm, nodular, and discolored pale yellowish gray. The nodularity was attributed to enlargement of retroperitoneal lymph nodes. Biopsy of a lymph node was attempted, but so much bleeding was encountered that the procedure was discontinued and the abdomen was closed. Chills and fever, accompanied by a pulse of 120 and a respiratory rate of 40 developed on the second postoperative day. Death occurred on the next day.

Clinical Discussion

DR. BERT M. BULLINGTON: The clinical record reveals that a forty-three-year-old white man incurred an illness of twelve years' duration that was characterized by an intermittent mass in the upper quadrant of the abdomen. There was an episode of pain in the left side of the chest radiating to the left shoulder that was thought to represent a "heart attack." The distribution of the pain, without extension into the left arm, and the subsequent course were not characteristic of myocardial infarction and suggest, instead, disease of the spleen or left lung with involvement of the diaphragm. Ascites developed toward the last portion of this illness and probably accounts for the maintenance of body weight in the presence of emaciation as indicated by wasting of the facial tissues. An interesting clinical feature was the blue discoloration of the peri-umbilical skin. This appears to have been hemorrhage into the skin rather than a true Cullen's sign which indicates intraperitoneal hemorrhage. Some important negative information includes the absence of "spider angiomas," palmar erythema, jaundice, alcoholism, hepatomegaly, lymph node enlargement, or melena. The laboratory data reveal a slight anemia, probably of normochromic normocytic type, with normal leukocyte and differential counts. There was a slight decrease in the serum albumin and a positive serum cephalin flocculation. Radiographs of the chest revealed clear lung fields and elevation of both domes of the diaphragm. We may pause here to consider the pre-operative diagnosis.

An intermittent mass in the left upper abdominal quadrant of long duration associated with laboratory evidence of diffuse liver disease and subsequently with emaciation and the formation of ascites is most suggestive of the decompensation phase of portal cirrhosis. The absence of dermal angiomas and palmar erythema does not preclude this diagnosis. Failure to palpate the liver is also consistent with portal cirrhosis as contraction of fibrous connective tissue reduces the organ to a size smaller than normal. The subsequent course is also acceptable under this diagnosis as clinical events may be rapidly progressive after the onset of portal decompensation. Cirrhosis may occur, of course, in the ab-

sence of chronic alcoholism, and abdominal exploration may have been undertaken with this diagnosis in mind.

Operation, however, revealed a normal liver. The peritoneal sac contained a large amount of red fluid and examination disclosed pronounced enlargement of the spleen. The splenic capsule was for the most part smooth, although pale gray discoloration and nodularity were identified over the posterior surface as well as beneath the adjacent parietal peritoneum. The latter was attributed to enlargement of retroperitoneal lymph nodes. The abdomen was closed and the patient died three days later.

The differential diagnosis regards those conditions that are characterized by prolonged and pronounced enlargement of the spleen. Both the duration and the degree of this enlargement eliminate the possibility of those acute infections that are often attended by splenomegaly. Only a small number of conditions are suggested by this splenic lesion. Gaucher's disease is one of these. This condition usually is manifest earlier in life but may be first detected at the age of forty-three years. A main clinical feature is marked splenic enlargement with or without hypersplenism. In addition, ascites may follow thrombosis of the splenic or portal veins. However, a familial occurrence is often detected, involvement of the skeletal system is usually observed, and enlargement of both liver and lymph nodes is characteristic. Without these findings, the diagnosis of Gaucher's disease appears unlikely. Pronounced enlargement of the spleen of long duration is often a feature of chronic myelogenous leukemia. However, this condition, even in the aleukemic phase, is usually accompanied by the presence of abnormal cells in the differential count, by a progressive and often pronounced anemia, and occasionally by widespread enlargement of lymph nodes. Furthermore, purpuric bleeding into skin and mucous membranes, particularly the gums, is a common feature of the terminal phase that derives from thrombocytopenia. This record does not describe these observations and the diagnosis of myelogenous leukemia is passed over. Boeck's sarcoid may be the cause of splenomegaly. However, manifestations in other tissues, notably lungs and lymph nodes, would be expected with an illness of twelve years' duration. Furthermore, hyperglobulinemia, characteristic of sarcoidosis, was not present. This diagnosis does not seem tenable. Myelofibrosis is also characterized by pronounced enlargement of the spleen that may be chronic. Lymph node enlargement in the region of the spleen is not a feature of this condition, however, and evidence of fibrous replacement of bone marrow is usually apparent in the form of anemia with immature cells of the granulocytic series in the differential count of circulating leukocytes. The diagnosis does not appear likely in the absence of these findings. There is no evidence to indicate the diagnosis of syphilis or chronic malaria which may also be the cause of splenic enlargement.

Particular attention may be paid to Banti's syndrome. This condition is characterized by splenomegaly, anemia, usually leukopenia, and frequently thrombocytopenia. The hematologic disturbances are known as hypersplenism. Banti's syndrome results from intrahepatic or extrahepatic obstruction of the portal system, and thus many conditions may be causative. In this case, thrombosis of the splenic vein warrants consideration. Extension of the thrombus into the portal vein may have been the event that preceded the rapid formation of ascites, and rupture of a small vein into the peritoneum may have been the cause of the hemorrhagic nature of the ascitic fluid. Furthermore, the bleeding into the skin of the abdomen could be due to thrombocytopenia. The diagnosis of Banti's syndrome is thus suggested. However, in Banti's syndrome, cirrhosis is common, gastrointestinal hemorrhage is frequent, and leukopenia is a constant feature. None of these was noted in this patient. Furthermore, it is most important to emphasize that enlargement of retroperitoneal lymph nodes and

focal nodularity of the spleen are apart from the morphologic changes of Banti's syndrome. Because of this, and in the apparent absence of hypersplenism, the diagnosis of Banti's syndrome is discarded. We now come to malignant tumors of the spleen. Two possibilities are

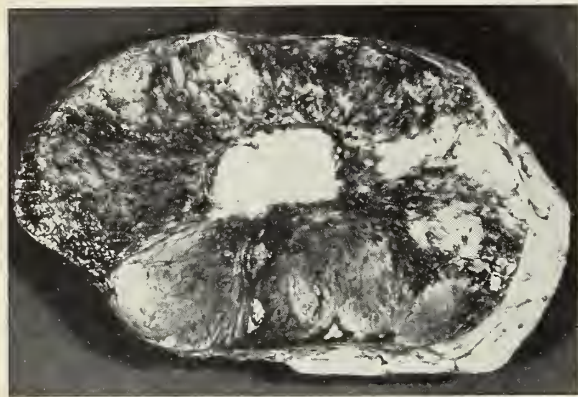


Fig. 1. Primary Hodgkin's disease of spleen.

reticulum cell sarcoma and Hodgkin's disease. Both may occasion splenic enlargement of long duration with ascites, slight anemia, and regional lymph nodes involvement without cirrhosis or abnormality of the circulating leukocytes. It is extremely likely that reticulum cell sarcoma would be demonstrable in tissues over a wider region than the spleen and adjacent nodes after twelve years' duration. Hodgkin's disease, however, may affect the spleen primarily, and may be localized in that organ for a long period, extending slowly to adjacent lymph nodes. The liver may be normal, the leukocytes are often within usual range, and a slight anemia is consistent. Peritoneal involvement may occasion hemor-

rhagic ascites, and emaciation is typical of this malignant disease. It is my opinion, therefore, that the information provided in this clinical record is most consistent with the splenomegalic type of Hodgkin's disease.

Diagnosis of Doctor Bullington

Hodgkin's disease of splenomegalic type

Diagnosis of Interns

Banti's syndrome secondary to splenic vein thrombosis

Anatomic Diagnosis (SLH-A-163)

Primary Hodgkin's disease of spleen with extension to diaphragm and involvement of pancreatic, gastric, and para-aortic lymph nodes

Acute diffuse fibrino-purulent peritonitis

DR. J. C. SMITH: Autopsy examination revealed a spleen weighing 2,200 grams that was massively replaced with tumor (Fig. 1). A large central portion was necrotic. The tumor extended into the diaphragm and was found in retroperitoneal and intra-abdominal lymph nodes. Tumor was not identified in tissues other than the spleen, diaphragm, and lymph nodes. Histologic examination revealed the polymorphous cell structure of Hodgkin's disease with characteristic Sternberg-Reed cells. The pronounced splenic enlargement with massive tumor replacement and the relatively slight involvement of lymph nodes and contiguous structures establishes on the basis of distribution, the primary nature of the splenic lesion. The massive fluid accumulation in the peritoneum was probably related to extension of tumor to that serosal surface. The intestinal tract was intact and the acute inflammation of the peritoneal serosa was a complication of the laparotomy. Death was attributed to acute fibrinous peritonitis associated with primary splenic Hodgkin's disease.

REPOSITORY FOR MEDICAL CERTIFICATES

Because of the tragic losses of educational records and official credentials of physicians resulting from wars and natural disasters in the past, the tenth General Assembly of World Medical Association adopted a recommendation of its Council, approving establishment of a Central Repository for Medical Records.

This action followed an extended study and consultation with other international organizations, none of which proposed to develop such a project themselves. All agreed it was urgently desirable and pledged their support and co-operation to the World Medical Association in developing the plan.

The national medical association in each country is to act as the "receiving agent" for the records of the doctors in that country, to verify such records, and to

forward them to the World Medical Association Secretariat for deposit. The types of credentials to be legally recognized and eligible for deposit have been established, as well as a system of identification. A repository has been selected. Identification forms and detailed information will be furnished individual physicians through their national medical societies and their component units in the near future.

The Central Repository Project has been developed in accordance with one of the World Medical Association's chief objectives: "to protect the interests of the medical profession." The success of the enterprise will depend on the co-operation of the national medical associations, and ultimately on the participation of the individual doctor whose vital interests this undertaking is intended to protect.

The Detroit Physiological Society

Meeting of December 20, 1956

ENZYMATIC ACTIVITY IN CELLS DURING CARCINOGENESIS

BJARNE PEARSON

The field of enzymatic histochemistry is approximately 15 years old. During this time many of the earlier uncertainties have been resolved and methods have been improved. It attempts to demonstrate and interpret activity and energetics on a molecular level and to correlate this on a cellular level.

The work to be reported here is limited mainly to the demonstration of enzyme activity in cells and tissues during carcinogenesis, normal growth and regression. The enzymes which will be dealt with are B-glucuronidase, nonspecific cholinesterase, alkaline phosphatase, succinic dehydrogenase, and nonspecific esterase.

Tissues to be studied are frozen to -70°C and cut in a Linderstrom Lang cryostat at -20°C at 5 μ . They are transferred to slides and kept in the cryostat until ready to go into their specific substrate. This procedure prevents loss of enzyme. Serial incubation times are used as well as standard pH conditions and substrate concentration.

The substrates used are (a) multiple reaction types, where the final product is inorganic, (b) azo compounds as naphthol esters coupled with stabel diazotates forming an insoluble organic compound and (c) single type reactions in which the enzyme changes the substrate to an insoluble chromogenic compound. The latter two have been modified and developed in this laboratory. They offer the best possibility for histochemical study of enzyme activity in normal and pathological tissue. Representatives of these are the iodo and nitro substituted tetrazolium chlorides for the study of succinic dehydrogenase activity and the bromo substituted indoxyl esters for the study of nonspecific esterases and other hydrolytic enzymes.

To study enzymatic histochemistry in tissue one has to be aware of the possibility of strain and genetic differences in animals with tumors and other pathological lesions. Two examples will be given. The first example is a survey of a series of animals with transplanted adenocarcinomas of the breast but of four tumors originating in their specific strains, one was high in B-glucuronidase activity and one was low. The enzyme activity of the liver and the kidney parallel the tumors. The next example is nonspecific cholinesterase assayed in ten strains of animals. The livers were high in three, intermediate in two and low in five strains.

During carcinogenesis of the liver produced by azo dyes there is a marked increase in activity of the enzyme alkaline phosphatase. Our study of several hundred tumors so produced showed that the increase in the enzyme was due to an increase in the bile ducts and vascular sprouts preceding tumor formation and that in the fully developed tumor only the vascularity accompanying the tumor showed enzyme activity. The tumor cells were negative for enzyme. In a series of induced carcinomas of the breast the alkaline phosphatase activity was present only in the luminal margins of the adenocarcinoma, scattered myoepithelial cells and vascular stroma. The solid areas of the tumor were negative. It was felt from this work that the role played by alkaline phosphatase during the formation of a carcinoma was that of transference of materials across membranes for synthesis and secretion. The total enzyme activity of the tumor depended upon the magnitude of such surfaces.

Several hundred tumors of the liver were studied for succinic dehydrogenase activity. These were induced by azo dyes and sacrificed every month until the eighth month when all the animals had developed tumors. Succinic dehydrogenase is present in normal liver cells, absent in normal and proliferating bile ducts, present in areas of cholangiofibrosis, present in the adenocarcinomatosis portion and absent in the solid portion of the tumor. Methods were worked out by us to estimate the succinic dehydrogenase activity on a single 5 μ microscopic section. The lowering or absence of succinic dehydrogenase activity previously reported by Schneider and Potter was due to the proportion of solid to adenomatous areas of the tumor and not necessarily due to the defect in the enzyme system as postulated by Warburg. Our conclusion was that you can have an equally malignant tumor with presence or absence of succinic dehydrogenase.

Nonspecific esterase was demonstrated by means of a new 5-bromoindoxyl acetate synthesized in our laboratory. After hydrolysis by tissue esterase immediate oxidation to a highly chromogenic insoluble 5,5 dibromoindigo takes place which is precipitated at the locus of enzymatic activity. Tumors which we have examined so far are devoid of nonspecific esterase activity. Nonspecific cholinesterase activity was studied in a variety of tumors and anabolic and catabolic processes. During rapid growth phase of the endometrial glands no enzyme activity was present but during secretory (or catabolic) phase the glands show marked

activity. In tumor growth the same phenomena occurs. During active growth in a carcinoma no enzyme activity is apparent but during regression of the tumor marked activity occurs. We have expressed a hypothesis that this may be due to the adsorption of the enzyme to the areas of necrobiosis from the blood stream.

SPECTROPHOTOMETRIC TITRATION OF SERUM AND SPINAL FLUID CALCIUM AND MAGNESIUM

BENNIE ZAK

A discussion of the several phases of the titration of calcium and magnesium in serum and spinal fluid has been investigated and these phases include dye variance, constitution of the titrant, spectral studies and accuracy and precision of the determination. Both separate determinations of the individual cations of the same sample as well as the use of the difference between total divalent cation and either constituent are involved in the analyses.

GLYCOPROTEIN PATTERNS OBTAINED BY THE ELECTROPHORETIC SEPARATION OF HUMAN SERUM ON STARCH

OTTO W. NEUHAUS and MARCIA LETZRING

A modification of the Elson and Morgan procedure for hexosamines has been devised that is readily used in conjunction with zone electrophoresis on starch. Aliquots of the eluates from the starch segments were hydrolyzed, dried over KOH, and neutralized. The compound (s) formed by the hexosamines in the hydrolysate and acetylacetone was extracted with isoamyl alcohol and an aliquot of this extract was then treated with Ehrlich's reagent. This procedure minimizes interferences from hydrolysate color and non-glucosamine substances that frequently react with Ehrlich's

reagent. Each step involved in this procedure has been studied to establish optimal conditions.

Protein and glycoprotein patterns were prepared with five normal individual sera and two pooled sera. Albumin, alpha-1, alpha-2, beta, and gamma fractions were evaluated planimetrically. Average values were obtained for hexosamine of 26.8 per cent in alpha-1, 33.0 per cent in alpha-2, 20.3 per cent in beta, and 19.8 per cent of the total in the gamma fractions. No significant hexosamine could be found in the albumin region. The average total hexosamine concentration for the sera used was 88.0 mg/100 ml.

THE SPECTROFLUOROPHOTOMETER AS A TOOL IN THE DEVELOPMENT OF NEW METHODS OF FLUOROMETRIC ANALYSIS

JOHN F. R. KUCK, JR.

With the spectrofluorometer, it is possible to examine with a high degree of resolution both the excitation spectrum and the fluorescent spectrum of any fluorescing solution. We have studied our standard method for the determination of total bile acid to show its deficiencies, and to attempt modifications which might improve it. Such attempts failing, we have developed a new procedure in which 0.1 millimole to 0.5 millimole of mixed bile acid (Cholic, deoxycholic, and chenodeoxycholic) is heated at 65° for 80 minutes with 10 ml of 65 per cent sulfuric acid containing formaldehyde in the ratio of 2 moles of HCHO to 1 mole of bile acid. When such a mixture is excited at 365 mμ and the fluorescence measured through a yellow filter, each bile acid gives about the same molar yield of phosphor. This determination is of clinical value as a simple and rapid method for evaluating the efficacy of a portacaval shunt and for studies of biliary disease. It is valuable in research for the presurvey of experimental samples and for checking specific methods for the individual bile acids.

Meeting of January 17, 1957

CHEMICAL AND IRRADIATION BONE MARROW DAMAGE AND ITS AMELIORATION IN RATS

J. K. WESTON, R. E. MAXWELL, J. FINZEL, M. LEE and R. A. FISKEN

Myleran administration to Holtzman rats in single, intravenous doses of 20 mg./Kg. uniformly produces severe bone marrow hypoplasia by the second week with over 90 per cent mortality before fourteen days have elapsed. No evidence of marrow recovery is demonstrable during this pe-

riod by either chemical (DNA, RNA) or histological (total nucleated count, smear count, histological section) techniques.

Single (or multiple) marrow injections of 125×10^6 rat nucleated marrow cells on any day from the first through the fifth after Myleran marrow insult reduces the fourteen-day mortality to near zero and causes about a 70 per cent return toward a normal marrow as evaluated by the same chemical and histological criteria. Rats have survived as long as 8 months in apparent good health following Myleran insult and single marrow transfusion as above.

Comparable marrow damage and mortality have been found to result following CO^{60} gamma irradiation at 800 r and the hypoplastic picture at 14 days post-irradiation marrow insult can be ameliorated to the same degree by similar rat marrow transfusion therapy. Comparable marrow and mortality results have been obtained at lower doses of irradiation where, of course, the mortality rate is much lower without treatment.

Although the total nucleated cell counts are comparable between the 800 r irradiation and Myleran insults, the distribution of cell types is different, particularly with regard to the lymphocyte (?) population.

ELECTRICAL ACTIVITY OF THE VISUAL SYSTEMS OF ANIMALS WITH PURE CONE RETINAE

ERNEST GARDNER, M.D. *Department of Anatomy
Wayne State University College of Medicine*

Among mammals, pure cone retinæ are apparently restricted to the Sciuridae, and in this family, ground squirrels are the most strongly diurnal.

The present report, a preliminary one, is the beginning of a study of the visual system of the antelope ground squirrel, *Citellus leucurus*, from California deserts, carried out in collaboration with Dr. Frederick Crescitelli.

C. leucurus is diurnal, has a pure cone retina, and relatively large optic nerves. The guinea pig by contrast has a pure rod retina, or nearly so. In these two species, studies were made of electroretinograms and visual cortex responses as evoked by flashes of light, in light and dark adapted states.

The ERG of *C. leucurus* is characterized by a sharp a-wave, prominent b-wave of varying complexity, and positive "off" response. The ERG of the guinea pig also has a definite a-wave, a prominent b of varying complexity, a longer lasting c-wave, and, depending on state of adaptation, sometimes an "off" response.

The cortical response in the guinea pig is mainly surface positive, sometimes diphasic. That in *C. leucurus* is mainly surface negative, sometimes with an initial, much smaller positivity.

Although *C. leucurus* has a pure cone retina, there were changes after light adaptation. These were especially striking in the cortex.

The following conclusions are offered, some very tentative, some more certain.

1. The eye of *Citellus leucurus* has a pure cone retina.
2. The ERG of *C. leucurus* is similar to that reported by Arden and Tansley for the grey squirrel and souslik. That of a rod retina (guinea pig) does not differ greatly.
3. The ERG of *C. leucurus* has a high threshold and shows definite changes during light and dark adaptation.
4. The evoked response in contralateral cortex is mainly surface negative, complex in shape, and changes during adaptation are more marked than in ERG.
5. There appears to be a marked neurological component in adaptation, probably mainly in retina.

THE RELATION OF PRENATAL AND POSTNATAL AGE TO RADIOPHOSPHORUS DISTRIBUTION IN THE RAT

The relative uptake of maternally administered radioactive phosphorus, P^{32} , at various times of gestation, will be presented and discussed in terms of the growth and specific growth curves of the intrauterine animal. The relative uptake of radiophosphorus by specific organs and systems at various times in the fetal and postnatal rat will also be presented. An attempt will be made to correlate these distribution patterns with the developmental processes at these various times of life.

HERNIATION OF ABDOMINAL VISCERA

(Continued from Page 479)

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Editorial

THE SPECIAL SESSION

For a year and a half, the medical profession has been the butt of a tremendous amount of misrepresentation and criticism about the increases asked for Blue Cross, the Hospital Service plan. The doctors were quite freely blamed by certain pressure groups for what they called "abuses," not recognizing that four interests were involved—the hospitals, the patients, and pressure groups in addition to the doctors. Delay of granting the rates requested prompted the Governor to appoint a Study Commission to hold open hearings and try to solve the problem, but no report has yet appeared. Newspaper publicity was very strongly tainted against the doctors.

The CIO threatened to take measures to correct the "Blue Shield insufficiencies," and organized in Detroit the Community Health Association, with the announced plan to offer to all who wished a medical service plan to cover "comprehensive" services—at a set subscription rate, with the guarantee there would never be any extra charges. Various meetings with invited persons, including physicians, established the evident threat to Medicine's cherished voluntary, non-profit program.

Recognizing the seriousness of the situation, the Council of the Michigan State Medical Society authorized the calling of a special session of the House of Delegates, the policy-making body:

1. To alert the medical profession to the competition facing Blue Shield (CHA; Government; Commercial Insurance).

2. To retailer Michigan Medical Service contracts to meet said competition more adequately.

3. To develop collective thinking among members of the profession as their only survival device—a united front must be presented.

4. To develop plans that satisfy the public (the ultimate judge), that are realistic and actuarially sound.

THE HAND WRITING

The Blue Cross-Blue Shield prepayment program of assuring the best of medical care to the lower income population saved the private practice of medicine from the double threat of an

unprecedented depression with no money to pay for medical services, and the very apparent willingness of government to take over and run the health services by civilian rules and regulations—Wagner-Murray-Dingall.

Many of our older practitioners fail to see the conditions as they are today, an entirely new medico-socio-economy, and refuse to conceive that government medicine can come.—All they need to do is look around. A large number of our younger physicians, graduated since 1939, have never experienced "hard times," and do not believe they can ever return—"government will never allow another depression." That attitude is not new and has never protected us.

Medical genius and willingness to sacrifice, faced with an intolerable problem, found the answer in the late 1930's and gave us almost a score of years of contented, satisfying, unhindered practice. The last three or so years have seen a complete change in socio-medical economy. The rewards for services have been good, the hours favorable, and an "established" practice almost for the asking.

But times were too good, obstacles too few, and our medical men discovered that because of "prepaid insurance" their patients could have the abundant and available best medical attention. All facilities for diagnosis and methods for convenient care were used—"insurance will pay, so why not order everything we might need?" Not a thought as to who pays—the patient always for his premium costs must be boosted to pay the bills. Too many physicians forget that Blue Shield is their own creature, their own pocket-book. Blue Shield is not insurance (by the enabling act); it is our own medical services which we are selling for a prepaid fee to our patients. Blue Shield is the Michigan State Medical Society.

Our patients, up to the \$5,000 income level, are now in the same relative condition as were those in the \$2,500 level when Blue Shield was born. There are some flaws which have been pointed out to us by various interests which, if not corrected, threaten to bankrupt Blue Shield and Blue Cross. For three or four years, the

(Turn to Page 506)

Professionalism: Our Greatest Value to Patients

All doctors of medicine are different, and no single composite face will fit them all . . . but it can be said that they are all products of their profession. And the key to understanding them and their work and the value that they are to their patients lies in that word "profession." The "professionalism" of the doctor is the one factor that makes his service of greatest value to the patient.

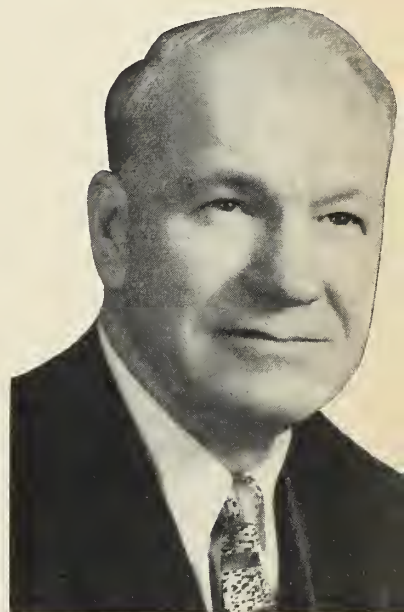
It is because the doctor is a professional man that the patient can confidently and confidentially reveal his secrets to him.

It is because the doctor is a professional man that the patient can accept his decisions as being directed solely toward the best interests of the patient and dictated by no ulterior motives.

It is because the doctor is a professional man that the patient can be assured that his doctor has access to all the knowledges of every other doctor because there can be no secret remedies practiced by any doctor of medicine. It is because the doctor is a professional man that every patient can be assured that when the real need arises, he will receive the best treatment the doctor can offer regardless of payment.

It is because he is a professional man that no doctor will decrease his quality of treatment, regardless of payments involved. It is because of these professional attributes and standards, plus the pride of the doctors in their profession, that the Michigan patient can have the best medical care in the world.

President's



Message

Arch Walls M-10

President, Michigan State Medical Society

medical leaders, officers of Michigan State Medical Society and of Michigan Medical Service, have pointed out practices which are reprehensible (with apparently little heed from medical men). Hospitals, in their fight for survival, patients who demand extra or increased service and pressure groups of various kinds must also accept responsibility for some of the abuse.

Is there any excuse for the physician who for a submucous operation, submits his hospitalized patient to a complete periodic health examination including gastro-intestinal, x-ray series, BMR, EKG, and blood studies amounting to about \$150 worth of extra laboratory expenses? How about the girl with hives who spends three days in the hospital with complete gastro-intestinal examination, x-ray survey, EKG, gastric and feces study, besides a complete physical and blood study? How about any diagnostic or acute case in which the patient has been given the whole gormont of examinations? Isolated cases? If they only were! Our record committees say the same men continue the same offenses day after day. Some method must be found to obviate these gross abuses among our doctors. Studies show that over 90 per cent of doctors never commit these errors.

Continuation of absolute heedlessness in our use of Blue Shield could abolish the whole voluntary, medically controlled, prepayment of medical services. Only two outcomes are then possible. The job of insuring *will* be done privately and commercially, but will *not* be medically controlled, or publicly by government-socialized medicine—which is now on the rocks in England.

Medical officers are again visiting every section of the state trying to carry the message to each and every member, hoping that each one of our members will attend and be convinced.

Several years ago the late Senator Vandenberg told us, "If Blue Cross and Blue Shield fail—socialized medicine will take charge."

MEDICAL EDUCATION WEEK

The week of April 21-27, 1957, has been designated as Medical Education Week by six organizations keenly interested in free, unhampered use of our medical teaching facilities: (1) Association of American Medical Colleges, (2) Ameri-

can Medical Association, (3) American Medical Education Foundation, (4) National Fund for Medical Education, (5) Students American Medical Association, and (6) Women's Auxiliary of the American Medical Association.

Several years ago, authoritative studies determined that our medical schools at that time desperately needed an additional \$10,000,000 a year to cover their needs and to maintain independent instruction. It was feared government grants which were being offered could lead to domination. Graduates were urged to make private gifts to the cause or to their own Alma Mater.

Too little was obtained, but the unencumbered sums have allowed most of our medical school Deans to retain desirable teachers, and to set up research problems of great value. Drs. Furstenberg and Scott at our "Dean's Conference" several years ago were glowing in their praise of this facility.

Medical Education Week offers us another opportunity to each to pay his tribute to his Alma Mater or to medical education in general. The month of April is a good one to remind ourselves of a duty and a privilege of making tax-free donations to what is probably the most important feature of education.

Michigan also has its own Foundation for Health and Medical Education, doing a worthwhile job of helping medical students to stay medical students. This, too, is a worthy objective. Earl I. Carr, M.D., Lansing, is President of this organization. Wm. M. LaFevre, M.D., Muskegon, Councillor for the Eleventh District, suggested that we all make a habit of a birthday or anniversary gift to any one or both of our special programs: Medical Education, The Michigan Foundation. The World Medical Association, organized to further independent medicine throughout the world and to combat communistic threats, is another worthy group to which we should send our \$10 memberships.

All this reminds us that Michigan is not producing enough doctors of medicine to supply all needed service to the people of this state. Our State Legislature is in session, and Wayne State University Medical School is asking for money to hire teachers and thus add another fifty doctors to our capacity and ability to serve our needy people.

MEDICARE TODAY

The Medicare program has now been in operation four months. Numerous problems have arisen and are being negotiated as they occur. Some of the rules do not work, and some services which most of the doctors and patients thought were covered must be paid by the patient, if at all. Office and home calls, except maternity, are not included.

General Paul R. Robinson, representing the Army, gives some interesting facts. Army dependents make up 25.5 per cent of medical claims; the Navy, 30.1 per cent; the Air Force, 42.7 per cent, and Public Health Service, 2.7 per cent.

All State Medical Societies are participating, except Rhode Island, where the Army is paying the doctors directly, and Ohio, where no agreement could be arranged and where an insurance company is handling the physicians' statements.

All the States will be asked to extend their programs beyond July 1, 1957, until they may be renegotiated at the rate of five per month.

CANCER CONTROL INVENTORY

American business takes time out each year to make an inventory of the past twelve months of operation. We, in medicine, and more particularly in the field of cancer, can profit by a critical self-analysis of our past years of work.

Through the program of lay and professional education, more lives are being saved. Cancer is seen and diagnosed earlier. There is more effective utilization of our treatment methods. Business and industry have a greater awareness of the toll cancer takes not alone in human lives but in lost time, lost production. Educators have found that the Junior High School level is not too young to begin the story of cancer.

The American Cancer Society, appreciative of the great need for a more active fight against cancer, has seen fit to re-appraise its research program. More funds must be channeled into research if we are to win the battle of cancer. True, the program has grown tremendously the past ten years, from about a million dollars to more than fifty million this year. This seems like quite a sum, yet there are departments of government spending many times more on research. This represents only a drop in the bucket to what industry allocates to research for improvement of its products. We must furnish the tools, the space, and the climate for the researcher.

As physicians, we are keenly aware of the attack on cancer through the use of chemicals. This vast field is being systematically explored through research. On the other hand, Dr. Wendell M. Stanley, Director of the Virus Laboratory of the University of California, stated at the Third National Cancer Conference, "The experimental evidence now available is consistent with the idea that viruses are the etiological agents of most, if not all, cancer, including cancer in man." Here, too, we see a great field for research. There have been pilot studies on the early diagnosis of uterine cancer through the use of cervical smears. These studies have shown conclusively the need for a broad acceptance of the cytological technique in the early diagnosis of cancer. Through the many avenues of research, we, as physicians, can be proud of the contribution science is making in the crusade against cancer.

The newly established Scientific Advisory Council of the American Cancer Society passes on all research programs. They point the way.

The immediate future has many facets from the test tube of the chemist, the microscope of the pathologist, the scalpel of the surgeon on to multiple million volt radiation therapy. Our inventory of the past shows progress; our predictions for the future are most hopeful.

CANCER COORDINATING COMMITTEE

OUR CHALLENGE

The past ten years have seen a tremendous increase in activity to control and eradicate the various forms of cancer. As the result of the organized educational campaigns of the medical profession and the American Cancer Society and even in this brief span of time, many physicians are seeing substantial improvement in mortality and morbidity from many malignant tumors. In spite of this ray of hope, however, much remains to be done if cancer is to be completely conquered. Furthermore, much more *can* be done if the medical profession will more adequately and efficiently use the knowledge now in its hands.

Delay in the diagnosis of cancer has always loomed large in the unsuccessful treatment of many forms of this disease. The forty-year campaign of the American Cancer Society has been largely responsible for the considerable improvement in public knowledge about cancer, thus reducing delay which is the fault of the patient. Cases where the physician is at fault are appar-

ently or actually increasing, according to the report by Leach and Robbins from Memorial Hospital in New York City. With optimum application of the readily available techniques of diagnosis and treatment, it is estimated that at the present time, five-year survivals could be improved by 10 per cent for skin cancer to more than 60 per cent for rectal cancer. Reliable estimates indicate that the number of cured cases of cancer could theoretically be more than doubled—this with our *present* knowledge of the disease.

Furthermore, we must emphasize that it is possible to identify the presence of a number of important cancers *in advance* of their usual signs and symptoms through the application of a few simple procedures adapted to office practice—an enterprise known as cancer detection. Here, we must stress the importance of thorough examination of female breasts, the routine use of the Papanicolaou smear test and the digital and proctosigmoidoscopic examination of the rectum. The examination of well persons does disclose unsuspected "silent" cancer in eight of every 1,000 persons unselected as to age, the rate rising with age to thirty-five per 1,000 among those over sixty.

One may well ask, "Is this yield worth the time, effort and expense?" Admittedly, this kind of scrutiny of presumably well people might be tedious for those who prefer to open boils and give injections as most of us do. There are many examples of why the concept of cancer detection in its preinvasive stages must be practiced by all physicians if we are to make progress against this common enemy.

Cancer of the cervix, the chief cause of death from cancer among women, is 100 per cent curable when adequately treated in the noninvasive stage, which is now identifiable by the simple Papanicolaou smear. Cancer of the lung is found to be localized—nearly equivalent of curable—seven times more often in patients whose tumors are discovered in a "routine" chest x-ray examination than in patients who need a chest examination because they are coughing or having chest pains and other symptoms. Cancer of the rectum can be felt in most cases and can be seen through the proctoscope in all when it is no bigger than a pencil's eraser, before bleeding, diarrhea and tenesmus occur—when seven or eight in ten may look forward to cure. This challenge is clear. To withhold prophylactic examination is to jeopardize life.

Recent clinical research has demonstrated growth-restraining properties of a number of hormonal and chemotherapeutic compounds, natural and synthetic, in advanced cancer of the prostate, breast cancer, Hodgkin's disease and other malignant lymphomas, acute leukemia and multiple myeloma. The list of these agents is not long, their range is limited, and their effects transitory. Yet, in selected cases, they do accomplish what was not possible five and eight years ago.

They, together with hematinic agents, vitamins of every known kind and in nearly every conceivable combination, nutritional adjuvants, sedatives, narcotics and hypnotics offering variety in dynamics and duration, make the management of terminal illness more effective for the patient and more satisfying to the doctor than it has even been before. Furthermore, it is our duty under the Oath of Hippocrates to use any or all of these agents to alleviate pain and suffering and thus forestall patients and relatives from seeking out the charlatan and quack who only raise false hopes and extract uncountable quantities of money solely for their own gain.

The challenge, then, to every physician and especially to the general practitioner is to accept his pivotal place in the contemporary effort to reduce deaths from cancer, to accommodate in his services any and every practice for achieving the earliest possible recognition of cancer, and finally, backed by the numerous fruits of modern pharmaceutical and clinical research to enable his patient to approach death from cancer in dignity and in comfort.

C. ALLEN PAYNE, M.D.

POLIO DISCUSSION

It had been our intention to publish an article in the March, 1957, issue of *THE JOURNAL* by M. V. Veldee, M.D., of the Stanford Research Institute, Menlo Park, California, entitled "Polio-myelitis Vaccine: Problems in Processing and Antigenic Value," which he presented to our Michigan Clinical Institute in March, 1956.

In the face of a rapidly changing problem and constant research, Dr. Veldee has requested that his paper not be published at this time, but that instead, we call your attention to Dr. Rutstein's discussion of the problem in the February, 1957 issue of *Atlantic Monthly*, which accurately and clearly presents the polio vaccine problem as it now exists.

Code of Procedures and Ethics Relating to Autopsies

Purpose

The performance of autopsies is essential to the welfare and protection of the public and to the advancement of medical science. All who are concerned with the performance of the autopsy must serve the interest of the relatives or friends of the deceased with respect to the care of the body. In connection with the autopsy, therefore, the hospital, the pathologist, and the funeral director agree to discharge their responsibilities on the highest professional standards, and to promote mutual trust, confidence, and good will.

Toward this end, the present Code has been arranged by agreement between the Michigan Funeral Directors Association, the Michigan Hospital Association, the Michigan Pathological Society and the Michigan State Medical Society.

This code shall not supersede any agreement made between local groups of funeral directors, hospitals or pathologists.

Responsibilities of the Hospital

Preparation of the Body.—In the preparation of the body, the head and shoulders should be elevated to prevent postmortem lividity in these exposed parts. The arms should be crossed over the trunk and held by cotton-padded strips of gauze above the elbows but not at the wrists. The eyes should be closed but nothing should be placed under the eyelids. The mouth should not be closed. (Strips of gauze used for this purpose leave objectionable marks.) Surgical dressing should be left in place. The body should be covered but not wrapped, and when possible kept refrigerated at 38 to 40° F.

Interest of Hospital in Autopsies.—The autopsy is performed as a public service and in the interest of science. It represents a considerable cost to the hospital.

Permission for Autopsy.—Permission should be secured

NOTE: The provisions and wording of this tentative draft were agreed upon by the following representatives of the designated organizations at a meeting held on November 29, 1956, at the Wayne County Medical Society, 4421 Woodward Avenue, Detroit.

Mr. Harold Dumancia and Mr. H. C. Burrell, Michigan Funeral Directors Association

Dr. James T. Howell and Dr. F. W. Hyde, Michigan Hospital Association

Dr. Lawrence W. Gardner, Michigan Pathological Society

Dr. John W. Robuck, Committee on Pathology, Wayne County Medical Society

Dr. S. E. Gould, Michigan Pathological Society and Michigan State Medical Society

Adopted by Michigan Funeral Directors Association, Inc., Michigan Hospital Association, Michigan Pathological Society, and Michigan State Medical Society, March 15, 1957.

with the least practicable delay. A suitable legal form should be used and properly witnessed, a copy of which shall be made available to the person granting permission. In general, a complete autopsy includes examination of the brain and organs of the neck, as well as the contents of the thoracic, abdominal and pelvic cavities. In requesting permission for autopsy, the nature and the extent of the autopsy should not be misrepresented; the hospital staff shall not use coercion or threaten to designate the death as a "coroner's or medical examiner's case," or refuse to sign the death certificate, if the cause of death is known.

Notification.—The hospital administration should notify the pathologist as soon as the autopsy permit is signed. As soon as the hospital learns the name of the funeral director, the hospital shall notify him that an autopsy is to be performed and that the body will be ready for delivery at a specified time. In order to obviate any inconvenience to the family of the deceased and in order to facilitate the funeral arrangements, it is essential that every effort be made to expedite the autopsy and permit the body to be delivered to the funeral director with a minimum of delay. Verbal and written notification shall also be given of any unusual hazard in handling of body, such as from gas gangrene or radio-activity.

Every effort should be made for the prompt completion of the death certificate or transit-permit.

When a promise has been made to relatives that they will be informed of the autopsy findings, the person making the promise should notify the pathologist of the name and address of the family physician or attending physician to whom the findings should be mailed. This physician will then be in a proper position to interpret the clinical manifestation of disease in the light of the autopsy findings.

Responsibilities of the Funeral Director

The funeral director (and embalmer) recognizes that his work is usually simplified in a body.

The funeral director (or embalmer) shall co-operate in every way with the hospital in requesting permission for autopsy; he shall assist the hospital in locating relatives in order to obtain permission for autopsy. It shall be deemed improper for a funeral director (or embalmer), by any manner or by implication, to dissuade the family from granting permission for an autopsy or to influence the family to change its mind after permission has been given.

It shall be considered unethical for a funeral director or embalmer to make a specific charge to the family because of preparation of a body following autopsy.

In order to correct misunderstanding or prevent possible criticism from any source, it is understood that the funeral director and the pathologist will communicate with each other at once if any question is raised in connection with the performance of an autopsy.

The funeral director should telephone the hospital to inquire when the autopsy will be completed, rather than call or have his attendant call at the hospital, without notice, to remove the body.

As a convenience to the family and as a courtesy to the pathologist, the funeral director, upon receipt of legal form granting consent for autopsy, will permit autopsies to be performed in the funeral home.

Responsibilities of the Pathologist

The autopsy shall be performed and the body made ready for delivery to the funeral director with the least practicable delay.

In some instances arterial embalming may be permitted (in the autopsy room, morgue, funeral parlor), before autopsy. However, such embalming interferes with the proper performance of the autopsy, as in septicemia, bacterial endocarditis, or suspected poisoning since there may be no way of knowing in advance if any of these conditions are present.

If delay is anticipated by the pathologist in performance of the autopsy, the funeral director should be notified so that the time of delivery of the body to the funeral director will be mutually satisfactory. If permission for autopsy is obtained after 4:30 p.m., the body should be ready for delivery by 11:00 a.m. of the next day; if permission for autopsy is obtained by 10:00 a.m., the body should be ready for delivery by 4:00 p.m. of the same day; if consent is obtained between 10:00 a.m. and 4:30 p.m. the body should be ready for delivery within 6 hours. It is obvious that the permission for autopsy must be delivered to the pathologist immediately after it has been obtained.

If any unusual procedure is found necessary for the proper performance of the autopsy, which may interfere with the work of the embalmer, the pathologist shall attach a note to the body or telephone the funeral director to explain the need for the procedure. Notification shall also be given of any unusual hazard in handling of body, such as from gas gangrene or radioactivity.

The pathologist should transmit his findings of the cause of death to the attending physician or responsible hospital medical officer as soon as possible to facilitate prompt completion of the death certificate or transit permit.

Mutual Responsibilities

All hospitals, pathologists, and funeral directors (and embalmers) shall periodically instruct all members of their staffs, employees, or agents who are concerned with these recommendations to enable them to carry out these provisions intelligently and efficiently. (In hospitals, this personnel will include administrative and office employees, nursing and medical staff, telephone operators, orderlies, and morgue attendants.) A copy of these provisions shall be posted in a conspicuous

location or made available to the personnel concerned.

It is recommended that this Code be incorporated in the curriculum of all schools of embalming, mortuary science, medicine and nursing in the State of Michigan.

Recommended Procedures in Autopsy

A "Y" incision is recommended for routine use, both in males and females. In females, the incision should be made below the breasts along the normal folds, and should not extend laterally beyond the anterior axillary lines.

Should it be necessary to turn the body over in examining the spinal column, the forehead should be placed on a support sufficiently high to prevent the face from touching any surface. The entire face, and particularly that portion of the forehead resting against the support, should be protected with a heavy cotton pack.

Cranial Examination.—Special care should be taken to preserve the normal facial features. A transverse incision in the scalp should be made from behind one ear, across the vertex (*but not anterior to it*), and to a point behind the other ear. In the removal of the calvarium, the temporal muscles should not be excised; instead, a single horizontal cut should be made through the thickest portion of each muscle and the incised portions bluntly reflected toward the cephalic and caudal attachments. The lines of sawing of the calvarium should be arranged to avoid over-riding by the replaced bone. One recommended procedure is to saw the occipital bone as far posteriorly as possible, leaving an inverted V-shaped or square projection on the remaining portion of the bone. Laterally the excised calvarium in the region of the mastoid process of each temporal bone should form an obtuse angle. If autopsy is performed prior to arterial embalming, the ends of the internal carotid and vertebral arteries should be left as long as possible and ligated prior to removal of the brain. Unless other arrangements are agreed upon locally for restoration of the cranial cavity, the latter should be left open. A few sutures in the scalp will hold the skull cap in place temporarily.

The nature of the autopsy will determine the extent of the examination. In general, certain precautions should be followed:

1. Incision in the posterior or lateral abdominal or thoracic wall should be avoided.
2. Surgical incision near the midline should be utilized as far as possible.
3. The breast plate should not be removed partially or retracted against the face. It should be disarticulated at its clavicular junction and be removed completely. At the end of the autopsy it should be replaced.
4. Long stumps and long ligatures should be left on the main arteries arising from the arch of the aorta. If tissue is to be removed from the neck regions for examination, the carotid and subclavian arteries should remain intact and major branches should be tied. If the trachea and larynx are to be removed, the superior

AUTOPSIES

thyroid arteries should be ligated close to the external carotid arteries.

5. The external iliac arteries should not be ligated but long stumps should be left so that they may be used for injection in embalming the inferior portions of the body. The internal iliac arteries should not be removed unless necessary.

6. If it is desired to remove a section of an artery of an extremity, the artery should be ligated beyond the cut ends prior to removing the section, unless the body has been previously embalmed.

7. The testes should be removed through the inguinal canals.

8. In removing the rectum, the anal stump should be ligated and care should be taken not to cut the rectum too close to the anus. The pelvic floor should not be cut.

9. If the entire uterus is removed, the vaginal canal should be closed by properly placed "purse-string" sutures, best applied externally.

10. As far as possible, all fluid shall be removed from the body cavities.

11. Depending upon local preference and agreement, after examination the organs may be inserted within plastic bags and placed within the body cavity, and the main incision then approximated with a running suture.

12. Tissues such as corneas, eyes, skin, bones, and blood vessels which are to be used for special purposes, other than for pathologic examination, shall be retained by the pathologist or the hospital, providing special

permission has been obtained. The embalmer should appreciate that the removal of some tissues, such as skin, may pose an additional problem for him.

Adjustment of Complaints

If any violation of this Code occurs, the matter should not be discussed with the family of the deceased but instead an effort to adjust the differences should be made promptly by the funeral director, the pathologist and the hospital concerned without any discussion with the family of the deceased, or by a local co-ordinating committee appointed for this specific purpose.

If agreement is not reached through such efforts, the violation may be referred to the State Committee on Autopsies. This committee should be selected annually and should be composed of one member selected by each of the following organizations: Michigan Funeral Directors Association, Michigan Hospital Association, Michigan Pathological Society, and Michigan State Medical Society. All complaints should be submitted to this committee in writing. Decisions and recommendations made by the committee with respect to complaints considered by the committee should be transmitted to the organization concerned for appropriate action. Should a member of the committee be involved in a dispute and such dispute be referred to the committee for investigation, an alternate member should be selected from the organization which he represents to take his place temporarily on the committee.

CIVIL DEFENSE MEDICAL ORGANIZATION

At a recent meeting of the Committee on National Defense, C. A. Anderson, M.D., reported on the Detroit Area Evacuation Plan which concerns itself with the care of evacuees and the care of casualties. It is felt that current planning and training programs are adequate. There are now fourteen training cadres meeting in the Detroit metropolitan area, six advance courses, approximately forty-two persons in each class.

Recently, seven counties met regarding co-ordination of medical civil defense activities in the down-state area.

Max L. Lichter, M.D., speaking on evacuation, stressed the need to plan for evacuation until some other better plan is introduced. The current planning is that with a warning or an alert time, an attempt will be made to get as many people out of the area as possible. There is a need to rendezvous personnel and some periphery area—doctors, nurses, dentists, and others trained to aid in case of a disaster. There is a need to plan how to utilize other professional personnel in areas to which the population has moved, and how to care for the evacuees, and development of plans for a hospital system.

The Committee was informed of some basic premises of its September, 1956, report, stating that an attack is possible; the aiming point could involve an error of possibly 20 miles and the mission of an enemy still be accomplished through radio-active fallout within the area of the point of impact based in some degree upon wind direction, speed, et cetera. Trained cadres for portable emergency hospitals, and casualty care stations are necessary and infirmity type units for continuing care of casualties. It is planned to publish a road map of Detroit and the area indicating assembly points and a proposed buffer zone between 15 and 25 miles from the central point of the City of Detroit. After discussion, a resolution was presented by J. S. Lambie, M.D., as developed by representatives of the medical societies

and civil defense medical services of seven southeastern counties of Michigan.

WHEREAS, today's weapons of war are of such magnitude that they transcend political boundaries, that the effects of such weapons will greatly concern geographical areas and populations far beyond the limits of physical damage, and

WHEREAS, the capabilities, efficiency and uniformness of civil defense forces and plans would be tremendously strengthened to prepare to meet the demands on the medical profession of perhaps hundreds of thousands of casualties caused by a military attack on the above mentioned area, and

WHEREAS, this target area has great problems of common concern which require intensive co-ordination and planning; and, eventually, operational control, therefore be it

RESOLVED, That we the representatives of the medical societies and civil defense medical services of the counties of Livingston, Macomb, Monroe, Oakland, St. Clair, Washtenaw and Wayne do hereby appoint a committee composed of Max Lichter, M.D., William Henry Gordon, M.D., John E. Griffin, or designee, Major General Clyde E. Dougherty, or designee; with Paul J. Shafer as Secretary, whose function shall be to establish a committee composed of a representative of the Public Health Office and the civil defense medical services of the respective counties, whose duties, in turn, will be to solicit the sanction, endorsement and support of the Inter County Board of Supervisors Committee, the Michigan State Medical Society; and to promote the establishment of a seven-county civil defense medical organization and operational plan, which shall be in conformity with the general civil defense planning of the State of Michigan. Representatives of additional counties may be added at a later date, if regarded desirable.

Michigan's Department of Health

Albert E. Heustis, M.D., Commissioner

POLIO CASES AND DEATHS IN 1956

Analysis of polio cases and deaths in Michigan in 1956 shows that both dropped sharply, compared with totals for 1955. There were 656 cases and twenty-three deaths in contrast to the 1,177 cases and thirty-one deaths in 1955.

Both cases and deaths shifted away from the age group that has received maximum protection through vaccination, children of fourteen and under.

Of the twenty-three Michigan persons who died from polio in 1956, none had received vaccine. Stated in another way, no person in Michigan who had received any portion of the three-shot polio immunization series died from this disease during 1956.

Of the 656 polio cases reported to the state health department in 1956, a total of 308 (47 per cent) were paralytic cases. This follows the average division between paralytic and non-paralytic cases in previous years.

Of the 308 paralytic cases in 1956, a total of 194 (63 per cent) were in the best protected age group, children from birth through fourteen. In previous years, 70 per cent or more of the paralytic cases occurred in the fourteen and under group. Three per cent of the 1956 paralytic cases occurred in persons over thirty-five years old. The oldest person to die from polio in Michigan last year was fifty-four.

Of the twenty-three deaths from polio in 1956, a total of eight (35 per cent) were in the fourteen and under age group. Prior to 1956, about 45 per cent of the polio deaths were in this age group.

The 1956 polio record was the best in Michigan since 1947, when 646 cases and twenty-nine deaths were reported. The state's worst polio year was 1952 when there were 3,912 cases and 213 deaths.

VENEREAL DISEASES NOT DECREASING

The continued high incidence of syphilis and gonorrhea in Michigan and their prevalence among teenagers are highlighted in figures compiled recently in the state health department.

The venereal diseases are not going down. New cases of syphilis totalled 4,865 in 1955, a slight increase over the 1954 total. Gonorrhea cases in 1955 numbered more than 10,000, highest since the post-war record of 1947.

Of equal significance is the age group in which cases of both syphilis and gonorrhea occurred. Twelve per cent of the early, infectious syphilis was in persons fifteen to nineteen years of age. About one out of six new cases of gonorrhea were reported in this age group, a total of 1,627 cases.

A survey in one of the large school systems has disclosed that venereal disease among school pupils, beginning at eleven years of age, has increased by about 100 per cent in the past fourteen years. And most of this increase is in active, infectious disease.

Practicing physicians are reporting six of every ten new cases of syphilis but less than three of every ten new cases of gonorrhea.

Both physicians and VD clinics are finding that penicillin reactions are much more frequent than in the past. When a reaction occurs, other, less effective, drugs must be used. There has been, for the first time so far as we know, definite proof that some strains of gonococci are penicillin-resistant.

TRAINING FOR TEACHERS OF EXPECTANT PARENT CLASSES

The department is continuing to assist communities interested in offering expectant parent classes by helping in the training of teachers.

An Institute for Teachers of Expectant Parent Classes, sponsored by the department and the Clara Elizabeth Fund of Flint were held at Gull Lake on April 10 to 12. In addition to Michigan specialists in expectant parent education, the faculty will include Kate Hyder, well known for her teaching in maternity nursing at Yale University and at Teachers College, Columbia.

TRAILER PARK SURVEY IN PROGRESS

A survey of trailer parks in Michigan has been in progress for several months, carried on by the division of engineering of the state health department. The survey has already covered thirty-three counties and work is being done in the southeastern counties.

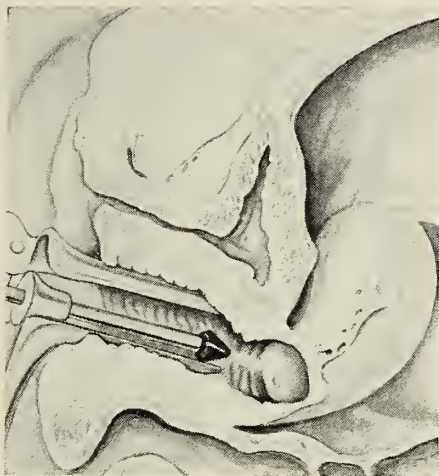
The purpose of the survey is to obtain information which should be of help to park operators and those responsible for the administration of laws and ordinances pertaining to the installation and operation of such parks.

RADIOACTIVE FALLOUT IN LANSING AREA

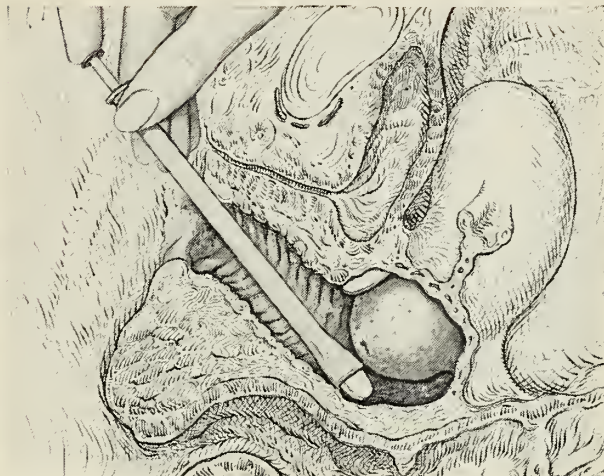
Since April, 1956, the Michigan Department of Health has been measuring the radioactive fallout in the Lansing area. Because of public interest in the subject, reports have been made routinely to the press. These reports have been discontinued in view of the lack of variation in the figures.

Records show that the radioactive fallout in the Lansing area has been slightly less this winter than it was last summer. The winter fallout is averaging 1.68×10^{-6} microcuries per cubic meter of air. Last summer's average was 1.8×10^{-6} microcuries. Readings during the two weeks preceding January 7 averaged 1.75×10^{-6} microcuries, about 1/200th of a dangerous dose for humans.

Over 75 per cent of all tumors of the large bowel are within the reach of the palpating finger, and nearly 85 per cent can be seen by the sigmoidoscope.



Powder Insufflation



Tablet Insertion

Floraquin® Rebuilds the Defense Mechanism in Vaginitis

Combined office and home treatment with Floraquin provides a comprehensive regimen which encourages restoration of the normal "acid barrier" to pathogenic infection.

Vaginal secretions normally show a high degree of protective acidity (pH 3.8 to 4.4). When this "acid barrier" is disturbed, growth of benign Döderlein bacilli is inhibited and that of pathogens encouraged. Floraquin not only provides an effective protozoacide and fungicide (Diodoquin®) destructive to pathogenic trichomonads and yeast, but also furnishes sugar and boric acid for reestablishment of the normal vaginal acidity and regrowth of the normal protective flora.

Suggested Office Floraquin Insufflation

"... the vagina is treated daily by swabbing with green soap and water, drying and insufflation of Floraquin powder."*

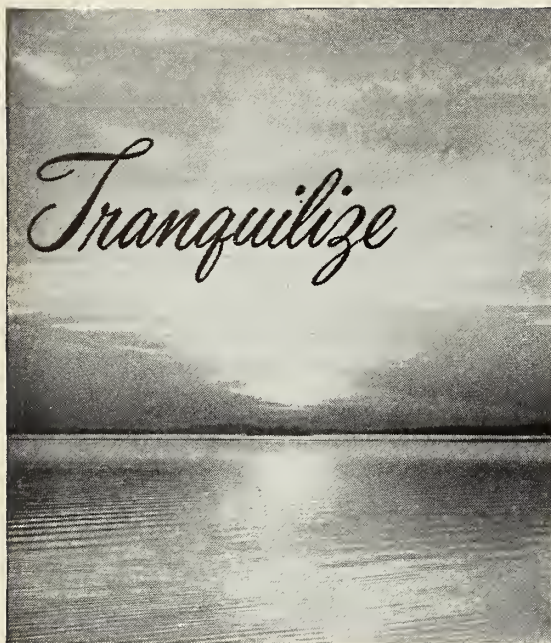
Suggested Home Floraquin Treatment

"The patient is also issued a prescription for Floraquin vaginal suppositories which she is instructed to insert high into the vagina each evening. On the morning following each application of these suppositories, the patient should take a vinegar water douche. . . ."

A Floraquin applicator is supplied with each box of 50 Floraquin tablets. G.D. Searle & Co., Chicago 80, Illinois, Research in the Service of Medicine.

*Williamson, P.: Trichomonad Infestation, M. Times 84:929 (Sept.) 1956.

SEARLE



CARBASED

ACETYL CARBROMAL TABLETS

- Proved safe and effective by 6 years' clinical use.
- Soothes the central nervous system, produces calmness without hypnosis.
- Non-toxic, non-cumulative, non-addicting, no known contraindications.
- Does not impair mental or physical function.
- Orally effective within 30 minutes for sustained action up to 6 hours.
- Economical.

Indications: Tension, nervousness, anxiety and muscular spasm.

*Supplied: White round tablets
Acetylcarbromal 5 gr. in bottles
of 100, 1000.*

Write for samples and literature

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In Memoriam

Charles E. Anderson, M.D., sixty-three, of Modesto, California, practitioner in Anvil for twenty-nine years. Born in Ironwood in 1893, he received his M.D. degree from the University of Michigan. Doctor Anderson was a member of the Michigan State Medical Society until 1955 when he moved to California following his retirement because of ill health. He died October 28, 1956.

* * *

Lewis E. Bracey, M.D., eighty-four, Sheridan physician for fifty-one years. Born in Greenville in 1872, he graduated from the Detroit Medical College in 1905. Dr. Bracey was a member of the Ionia-Montcalm County Medical Society, and a Life Member of the Michigan State Medical Society. He died January 20, 1957.

* * *

Harvey F. Brown, M.D., fifty-six, of Detroit, former Notre Dame football star, had practiced in Detroit since 1928. Born in 1900, he received his M.D. degree from St. Louis University. Dr. Brown was active in Wayne County Medical Society affairs. He died January 13, 1957.

* * *

Constantine A. Cetlinski, M.D., sixty-two, former Hamtramck councilman and health director. Born in 1895, he was a member of the Wayne County Medical Society and the Michigan State Medical Society. He died January 2, 1957.

* * *

Robert P. Coseglia, M.D., forty-seven, of Grosse Pointe Park. A staff member of Holy Cross, Doctor's, Detroit Memorial, St. John and Saratoga General Hospitals, he was also a member of the Wayne County Medical Society and the Michigan State Medical Society. He died February 25, 1957.

* * *

Joshua Hanser, M.D., eighty-two, general practitioner in Detroit for more than fifty years. Born in 1874, he received his M.D. degree from the Detroit Homeopathic College in 1906. He was a member of Wayne County Medical Society, a Life Member of the Michigan State Medical Society, and a member of the MSMS Fifty-Year Club. He died January 9, 1957.

* * *

Thomas F. Horrigan, Jr., M.D., thirty-six, Highland Park practitioner. A native of Detroit, he received his M.D. degree from Wayne State University College of Medicine in 1945. He was a member of the Wayne County Medical Society. He died August 13, 1956.

* * *

John B. Horwitz, M.D., fifty-five, family doctor in Detroit for three decades. Born in Russia, Dr. Horwitz came to Detroit fifty-one years ago. He was graduated from the Detroit College of Medicine, and was a member of the Wayne County Medical Society. He died January 13, 1957.

(Continued on Page 538)

can you read this thermometer,



doctor?

Naturally not. Missing calibration makes it worthless.

Equally useless and dangerous is a "quantitative" urine-sugar test that does not quantitate dependably, or omits readings in the critical range.

Enzyme urine-sugar tests are sensitive and specific for glucose—excellent "yes" or "no" tests but undependable for quantitation. King and Hainline,¹ after testing 1,000 urines, found an enzymatic urine-sugar test unable to distinguish in the important range between $\frac{1}{2}$ per cent and 2 per cent or more of urinary glucose. Leonards,² in a report on 4,020 tests, revealed that "...in 502 out of 804 tests the wrong interpretation was made." He concluded that enzymatic urine-sugar testing "...as a quantitative procedure is unsatisfactory and can lead to serious error in the interpretation of a patient's clinical condition."²

Failure to recognize this limitation of enzyme tests may result in incorrect insulin dosage,² and may lead to diabetic complications.

(1) King, J. W., and Hainline, A., Jr.: Commercial Glucose Oxidase Preparations for the Detection of Glucose in Urine, *Cleveland Clin. Quart.* 23:212, 1956. (2) Leonards, J. R.: Evaluation of Enzyme Tests for Urinary Glucose, *J.A.M.A.* 163:260 (Jan. 26) 1957.

reliable readings throughout the critical range—
does not omit $\frac{3}{4}$ % (++) and 1% (+++)

color
calibrated
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BRAND

a 15 year "standard" in urine-sugar testing



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38157

Correspondence

MEDICARE (Dependents' Medical Care Act)

Dear Mr. Burns:

It has been brought to my attention that some of the persons with whom we have negotiated contracts under the Dependents' Medical Care Act are of the opinion that the Program is not one of full service coverage. This concept may have arisen because the Act itself is not specific regarding this matter. It may also have arisen either because certain fees are stipulated to be paid by the patient or because the contract allows for an unusual or difficult case an additional fee payable by the Government to the physician if he makes proper request under a special report.

Upon inquiry, I have been assured that members of the negotiating teams have not indicated the contract is other than for full coverage. Further, no instance has been found where any member of the negotiating teams has, in any way, intimated that the Dependents' Medical Care Program is not one of full coverage.

In order to clarify this matter and to avoid any improper interpretation of the Dependents' Medical Care Act with regard to payments to physicians under a Schedule of Allowances as provided in our contracts, the position of the Department of Defense as is being carried out by my office is submitted for your guidance:

(a) It is intended that civilian medical care authorized under Public Law 569, 84th Congress, will be on a basis comparable to that provided in uniformed services medical facilities. Except for specified amounts to be paid by the patient, the services which are provided under the law will be furnished by physicians participating in the program who will receive payment in full from the Government in accordance with the published Schedule of Allowances or under a special report as the case may be. In most instances, this means that the physician participating in the program will receive payment for his usual charge or the amount established in the local schedule of allowances, whichever is less.

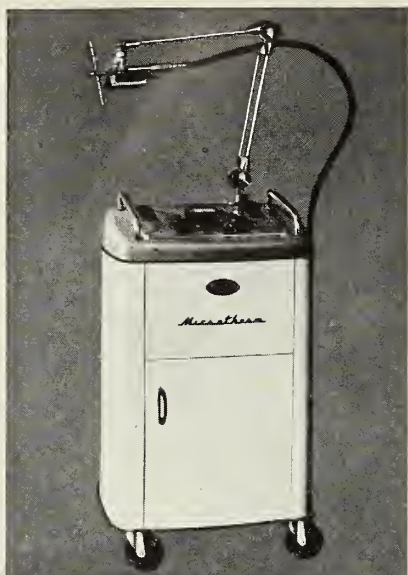
(b) Section 5, paragraph 507b, of the Joint Directive promulgated by the Secretary of Defense and the Secretary of Health, Education, and Welfare provides as follows:

"The Executive Agent (Secretary of the Army) shall be responsible within the continental United States, Alaska, Hawaii, and Puerto Rico for the following: (1) Preparation of the terms and placement of the contract or contracts to be established to include but not limited to: Local schedules of allowances to be used in full payment of bills presented by physicians and surgeons." [Italics added.]

A copy of this Joint Directive is an integral part of every contract and there is no question that the contract provides for full service coverage.

(c) There may be unusual instances in which the physician will believe that an allowance greater than that prescribed in the local schedule of allowances is justified. In such cases, the physician should look to the Government for additional payment, and not to the patient. Provision is made for the physician to submit a special report to his state medical society and in turn to the Government as a request for additional payment. Such additional payment will be made upon approval by

(Continued on Page 534)



**FOR "SIGNIFICANT"
THERAPEUTIC HEAT**

The Burdick MICROWAVE DIATHERMY UNIT

Studies by Martin and Herrick* indicate that microwave diathermy creates "significant" rapid deep heating of localized tissues for effective relief of pain and muscular rigidity in such conditions as:

bursitis fibrositis myositis
strains and sprains pelvic inflammatory disease
neuritis (of varying origin)

Simplified operation, convenience, safety, comfort to the patient and the traditionally rigorous Burdick engineering standards mark the Burdick Microwave Diathermy unit as a highly proficient therapeutic agency.

For a review of the advanced features of this outstanding unit, see your Burdick dealer.

*Martin, G.M., and Herrick, J. F.: Further Evaluation of Heating by Microwave and by Infra-red as Used Clinically, J.A.M.A. 159:1286 (Nov. 26) 1955.

For information write —



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Borden's has a fresh dairy food for almost any dietary requirement

In addition to such familiar items as Borden's Homogenized Vitamin D Milk, Borden's Cream, and Dutch Chocolate Milk, we'd like to remind you of our regular and low-calorie Cottage Cheese, Buttermilk, and Gail Borden Milk and Skimmed Milk — all helpful in dietary planning.

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Each quart contains 100% of the average daily requirements of 8 of the 10 essential vitamins and minerals

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Borden's

MICHIGAN MILK DIV.

MEMBERSHIP RECORD

Michigan State Medical Society

MEMBERSHIP RECORD—1956

COUNTY MEDICAL SOCIETY	PAID		SPECIAL MEMBERS				DEATHS		NET MEMBERSHIP		1956		UNPAID	
	1956	1955	L I F E	R E T I R E D	A S S I S T A N T	M E M B E R	1956	1955	1956	1955	G A T H E R I N G	L O S S E S	1956	1955
Allegan	20	24	—	—	—	1	—	3	21	21	—	—	—	—
Alpena, Alcona, Presque Isle	23	24	—	—	—	—	1	—	24	27	—	—	—	—
Barry	14	16	2	—	—	—	—	1	16	17	—	—	—	—
Bay, Arenac, Iosco	73	72	4	2	—	3	4	—	78	82	—	—	—	—
Berrien	91	82	—	—	—	1	2	2	90	82	8	—	1	2
Branch	24	24	4	—	—	—	—	—	28	27	1	—	—	—
Calhoun	101	100	12	3	—	24	—	1	140	137	3	—	—	—
Cass	8	9	2	—	—	—	—	—	10	11	—	—	—	—
Chippewa-Mackinac	24	23	3	1	—	—	2	—	26	27	—	—	—	—
Clinton	16	15	1	—	—	—	—	—	17	16	1	—	—	—
Delta-Schoolcraft	20	20	2	—	—	1	1	—	22	24	—	—	—	—
Dickinson-Iron	18	18	1	1	—	—	—	—	20	20	—	—	—	—
Eaton	22	19	—	—	—	4	—	—	26	23	3	—	—	—
Genesee	232	213	16	—	—	97	8	5	337	325	12	—	22	1
Gogebic	18	20	1	—	—	—	—	—	19	21	—	—	—	—
Grand Traverse, Leelanau, Benzie	51	47	1	2	—	—	3	1	51	53	—	—	2	1
Gratiot-Isabella, Clare	43	41	2	—	—	—	—	1	45	42	3	—	—	—
Hillsdale	12	14	5	—	—	1	—	—	18	20	—	—	2	—
Houghton, Baraga, Keweenaw	24	24	6	—	—	1	1	—	30	31	—	—	—	—
Huron	15	14	—	—	—	—	1	—	14	15	—	—	—	—
Ingham	204	194	5	8	—	46	2	2	261	240	21	—	17	—
Ionia-Montcalm	39	36	7	—	—	—	—	—	46	42	4	—	—	—
Jackson	99	100	14	—	—	9	2	3	120	117	3	—	—	—
Kalamazoo	158	141	9	2	—	19	1	—	187	157	30	—	—	—
Kent	347	329	16	1	—	36	9	3	391	379	12	—	3	5
Lapeer	19	15	3	—	—	1	1	—	22	20	2	—	—	—
Lenawee	44	40	1	—	—	1	1	—	46	43	3	—	—	—
Livingston	21	21	—	—	—	—	—	1	21	20	1	—	—	—
Luce	9	11	1	—	—	1	—	—	11	12	—	—	—	—
Macomb	75	69	1	—	—	—	1	—	75	70	5	—	2	—
Manistee	10	10	1	—	—	—	—	1	11	10	1	—	—	—
Marquette-Alger	38	36	5	1	—	4	1	—	47	44	3	—	—	—
Mason	12	12	—	—	—	1	—	—	13	13	—	—	—	—
Mecosta, Osceola, Lake	16	15	2	—	—	—	—	—	18	17	1	—	—	—
Menominee	16	15	1	—	—	—	1	—	16	16	—	—	—	—
Midland	32	28	—	—	—	1	1	—	32	29	3	—	—	—
Monroe	38	36	1	—	—	—	1	—	38	36	2	—	—	—
Muskegon	99	100	5	1	—	2	4	1	103	107	—	—	4	—
Newaygo	11	8	—	—	—	—	—	—	11	8	3	—	—	—
North Central	21	23	1	1	—	1	—	1	24	26	—	—	2	—
Northern Michigan	35	35	3	—	—	2	—	—	40	37	3	—	—	—
Oakland	301	278	14	—	—	3	5	2	313	300	13	—	11	3
Oceana	8	8	1	—	—	2	1	1	10	10	—	—	—	—
Ontonagon	4	4	1	—	—	—	—	—	5	5	—	—	—	—
Ottawa	53	51	1	—	—	—	1	—	53	55	—	—	2	—
Saginaw	138	130	7	5	—	3	1	—	152	148	4	—	—	—
St. Clair	64	63	1	4	—	5	2	1	72	74	—	—	—	—
St. Joseph	23	23	2	1	—	—	1	—	25	26	—	—	1	—
Sanilac	14	13	—	—	—	1	—	—	15	14	1	—	—	—
Shiawassee	28	27	—	—	—	2	—	1	28	28	—	—	—	—
Tuscola	17	15	1	—	—	—	1	—	17	17	—	—	—	—
Van Buren	23	21	1	—	—	—	1	—	23	23	—	—	—	—
Washtenaw	236	220	10	2	—	119	2	4	365	332	33	—	—	—
Wayne	2570	2416	83	22	—	62	44	25	2693	2589	104	—	30	23
Wexford-Missaukee	16	16	2	—	—	—	—	—	18	17	1	—	—	—
Honorary	—	—	—	—	—	—	—	—	6	7	—	—	—	—
TOTAL	5687	5378	264	58	—	454	110	64	6360	6109	284	33	108	47

This is part of the Secretary's Annual Report for 1956. Please refer to Page 366 of the March number JMSMS.

Plainwell Sanitarium

PLAINWELL, MICHIGAN

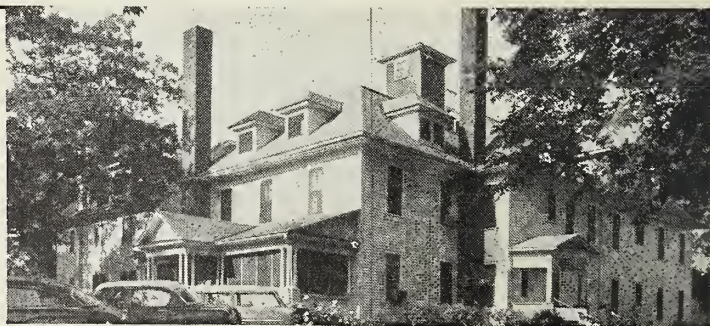
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Recent Advances

In Feeding Prematures

Recent metabolic studies have established rational feeding procedures for prematures.

The initial feeding, 12 hours after birth, consists of one dram of 5 per cent dextrose. This solution is increased by one dram at 2-hour intervals if tolerated and retained.

After twenty-four hours, breast milk or formula (table below) gradually replaces the prelacteal feeding at 2-hour intervals. The volume of a feeding may be increased up to 2 drams daily until maintenance caloric requirements are fulfilled by the fifth day. If the infant shows signs of intolerance, the formula increase is made more slowly and the fluid requirement fulfilled parenterally.

Successful feeding mixtures consist of dilutions of powdered half-skimmed or evapor-

ated whole cow's milk, skimmed or whole lactic acid milk. These formulas contain high protein, moderate carbohydrate and low fat, yielding about 120 calories and 150 cc. fluid per kgm. body weight.

The problems of prematures are always the same but the solutions differ with each era. Today the moderate carbohydrate requirement for normal infants as well as prematures is fulfilled by KARO® Syrup as adequately as a generation ago. Whatever the type of milk adapted to the infant, KARO may be added confidently because it is a balanced mixture of lower sugars resistant to fermentation, non-laxative, easily assimilated and well tolerated by all infants.

Readily available in all food stores.

MEDICAL DIVISION
CORN PRODUCTS REFINING CO.
17 Battery Place, New York 4, N. Y.

R FIRST FORMULAS FOR PREMATURES

Fresh or whole lactic acid milk	6 oz.
Water	12 oz.
KARO	1 oz.

Evaporated milk	3 oz.
Water	15 oz.
KARO	1 oz.

Dried milk (half-skimmed)	4 tbsp.
Water	18 oz.
KARO	1 oz.

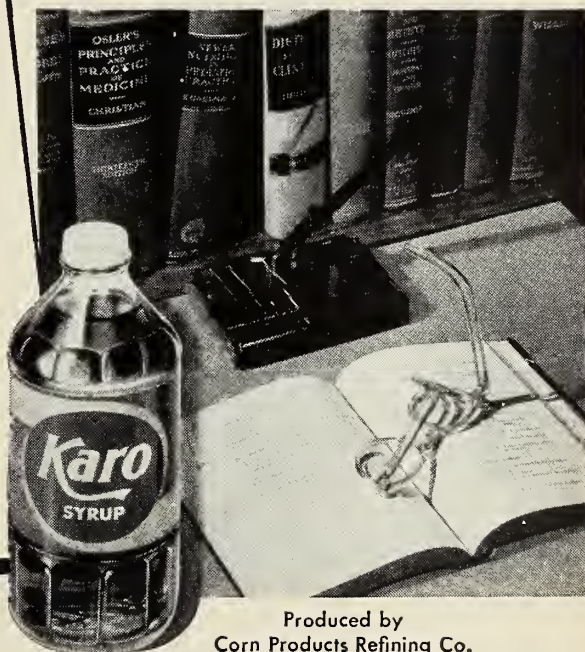
Feedings: 1½ oz. x 12 x 2 hours

Measures: 1 oz. KARO = 2 tablespoons

Caloric values: KARO, 120 per oz.; Cow's milk, 20 per oz.; Evaporated milk, 45 per oz.; Dried milk (½ skimmed), 35 per oz. (Vol.).

Equivalents: Red Label KARO or Blue Label KARO may be used interchangeably in all formulas.

Adapted from Nelson's Pediatrics, Saunders, Phila. 1954



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NEWS MEDICAL

MICHIGAN AUTHORS

Stanley Finkel, M.D., Elizabeth Grodzka, B.A., and Ivan F. Duff, M.D., Ann Arbor, are the authors of an article entitled, "The Medical Arthritis Clinic of the University Hospital," published in the *University of Michigan Medical Bulletin*, December, 1956.

A. C. Furstenberg, M.D., Ann Arbor, is the author of an article entitled "Look to the Future," presented at the Sixty-First Annual Session of the American Academy of Ophthalmology and Otolaryngology, October, 1956, in Chicago, and published in the *Transactions, American Academy of Ophthalmology and Otolaryngology*, November and December, 1956. This was the address of the President of the Society.

Melvin M. Figley, M.D., Ann Arbor, is the author of an article entitled "New Contributions of Radiology to Ophthalmology and Otolaryngology through Vascular Visualization," presented by invitation at the Sixty-First Annual Session of the American Academy of Ophthalmology and Otolaryngology, October, 1956, in Chicago, and published in the *Transactions, American Academy of Ophthalmology and Otolaryngology*, November-December, 1956.

J. P. Gray, B.A., M.D., M.P.H., Detroit, is the author of an article entitled "Report of Visiting Lecturer on Medical Writing: On Activities During 1955-1956," presented at the 13th Annual Meeting, American Medical Writers' Association, Chicago, September, 1956, and published in the *Mississippi Valley Medical Journal*, January, 1957.

Paul de Kruif, Ph.D., Holland, is the author of an article entitled "Today's Treatment of Acne," published in *Today's Health*, March, 1957.

H. Waldo Bird, M.D. and Peter A. Martin, M.D., Detroit, are authors of an original article "Countertransference in the Psychotherapy of Marriage Partners" which appeared in *Psychiatry: Journal for the Study of Interpersonal Processes*, November, 1956.

* * *

New Appointment under H.E.W.—The new Under Secretary of Health, Education, and Welfare is John A. Perkins, Ph.D., forty-two-year-old president of the University of Delaware; he succeeds Herold C. Hunt, Ph.D., who has returned to Harvard. Dr. Perkins, one of the youngest university presidents when he took over at Delaware in 1950, once served as secretary to the late Senator Vanderburg and was state budget director for Michigan.

* * *

Why Blue Shield Must Keep on Growing is the title of an editorial appearing in the January Connecticut State Medical Journal. The editorial points out that

since Blue Cross and Blue Shield have gained wide public acceptance—Blue Cross enrollment is now over 50 million and Blue Shield enrollment is near 40 million—"one hears the suggestion that Blue Shield attempts to 'stabilize' its enrollment and relax its efforts to cover an ever larger cross section of the population. But the demand for prepaid medical care is now almost universal; and those who have it are asking for broader coverage and better contracts."

The editorial states that, "The continued growth of Blue Shield is essential to the best interests of both medicine and the public." It goes on to explain why this is so. "First, because Blue Shield is a major factor in medicine's economy. Whereas installment buying creates a debt and mortgages the future, medical prepayment creates a credit for the patient, and protects his future. Again, Blue Shield's growth safeguards its actuarial base of operations. As risks are spread ever more widely, the community and the doctor gain a surer protection against fluctuations affecting the subscription rates or payments to physicians.

"A third benefit of Blue Shield growth is the opportunity to reduce operating costs per person enrolled. This helps the plan to broaden its services or to raise its payments to doctors—or both. Fourthly, the greater the number of his patients covered by prepayment, the fewer for whom the doctor has a collection problem, and the lighter his load of free or part-pay work." And finally, "Medicine's most significant benefit from the growth of Blue Shield is the dominant influence of the medically guided Blue Shield Plans on the shape and destiny of the voluntary health insurance movement as a whole. Were it not for Blue Shield, the medical profession would have no effective control over the basic economy of private practice."

* * *

Health Insurance for Older Citizens is the title of an article by John H. Miller, Monarch Life Insurance Company, which appeared recently in American Economic Security magazine. In this article he cites a recent study by the Bureau of Labor Statistics covering nearly five million workers under 300 collectively bargained health insurance plans. The study showed that hospital and surgical benefits are continued after retirement for 35 per cent of these workers. It also showed that for "nearly 80 per cent of the employees whose coverage continues after retirement, there is no reduction in the amount of hospital and surgical benefits."

Mr. Miller points out that "individual policies covering older persons have become widely available."

(Continued on Page 522)

“À VOTRE SANTÉ”

(To Your Health)

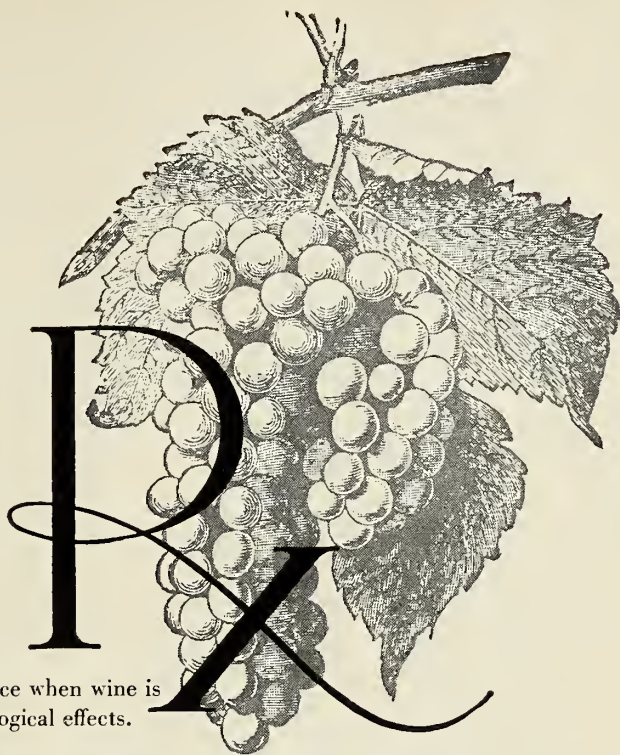
In any language, the traditional toast to good health takes on a meaning of more than passing significance when wine is used for its established physiological effects.

The carminative action of wine has been found to whet the sluggish appetite of the anorexic, post-surgical or convalescent patient; the mild secretory stimulation that follows the ingestion of wine is beneficial to the lax and generally achlorhydric stomach of old age; prudent quantities of wine are helpful in reducing the emotional pressure which aggravates hypertension, encouraging a generalized vasodilatation and stimulating a mild euphoria, so gratifying to the hypertensive, the aged, and in the recovery phase of illness.

And for the patient who has difficulty in dropping off to sleep, a small amount of Port or Sherry taken at bedtime is gently sedative and sleep-producing—frequently obviating the need for medication.

The Fine Wines of California—California's 700-mile vineyard belt affords a range of soils and climate in which can be grown the world's finest wine grapes of every variety. Add to this natural advantage the modern wine-making skills and facilities of a progressive *New World* industry, and you have wines of strict quality standards, true to type, moderate in price.

Wine Advisory Board,
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- ELASTIC PLASTIC
- FLESH COLORED
- STAYS CLEAN
- THIN, SMOOTH PLASTIC
- GREASE RESISTANT
- WON'T WASH OFF

100's 1" x 3"

100's 3/4" x 3"

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Medical Arts Pharmacy

20-24 Sheldon S.E.

Phone GL 9-8274

Grand Rapids 2, Mich.

(Continued from Page 520)

According to a study made in 1955 by the Bureau of Accident and Health Underwriters, 106 out of 186 companies participating in the survey would accept new applications for hospital expense insurance above age 60. Of these, 11 imposed no maximum age limit while others had various limits such as 65, 70, 75 or 80. With respect to the renewal of policies previously issued, half of the companies surveyed reported that they had no maximum age limit.

* * *

Occupational medicine was formally recognized and given certification basis in February, 1955, by the American Board of Preventive Medicine. Two years were allotted to complete the listing of Founder members. Eligible were men in this field who were outstanding in their professional positions, school affiliations, wide acceptance as leaders and with a minimum of ten years of distinguished service. Three Army officers were included: Col. John R. Hall, Chief of Occupational Health, Surgeon General's Office; Lt. Col. Edward J. Dehne, C.O. Army Environmental Health Laboratory, Edgewood, Maryland, and Maj. Gilbeart H. Collings, specialist in occupational medicine, of the same laboratory.

* * *



Tuberculosis is becoming more a problem among older men and less a problem for young women. A study of two three-year periods, 1947-1949 and 1953-1955, showed a drop of 9 per cent in the total number of new tuberculosis cases reported. Only among the people sixty-five years and older was there an increase in the number of cases reported. The number of new cases during the 1947-1949 period for men sixty-five years and older was 1,247. It climbed to 1,590 in the 1953-1955 period. The greatest decline in new cases reported was among women in the fifteen to twenty-four year age group. It dropped from 1,526 in the earlier period to 883 in the latter period.

Men over forty-five years of age accounted for 34 per cent of the new cases found from 1953 through 1955. Men and boys under forty-five ranked second, making up 29 per cent of the new cases. Women and girls under forty-five accounted for 25 per cent of the new cases and women over forty-five only 12 per cent.

MICHIGAN TUBERCULOSIS ASSOCIATION

* * *

World Health Day, April 7, marked the anniversary of the coming into force of the Constitution of the World Health Organization in 1948. It afforded an added opportunity to arouse popular interest in health needs and to stimulate the people's participation in the work of improving health.

There is an intimate relationship between health and the production of food. Therefore World Health Day in 1957 was co-sponsored by the Food and Agriculture Organization.

(Continued on Page 524)

among nonhormonal antiarthritics...

unexcelled in
therapeutic potency

BUTAZOLIDIN[®]

(phenylbutazone GEIGY)

In the nonhormonal treatment of arthritis and allied disorders no agent surpasses BUTAZOLIDIN in potency of action.

Its well-established advantages include remarkably prompt action, broad scope of usefulness, and no tendency to development of drug tolerance. Being nonhormonal, BUTAZOLIDIN causes no upset of normal endocrine balance.

BUTAZOLIDIN relieves pain,
improves function,
resolves inflammation in:
Gouty Arthritis
Rheumatoid Arthritis
Rheumatoid Spondylitis
Painful Shoulder Syndrome

BUTAZOLIDIN being a potent therapeutic agent, physicians unfamiliar with its use are urged to send for detailed literature before instituting therapy.

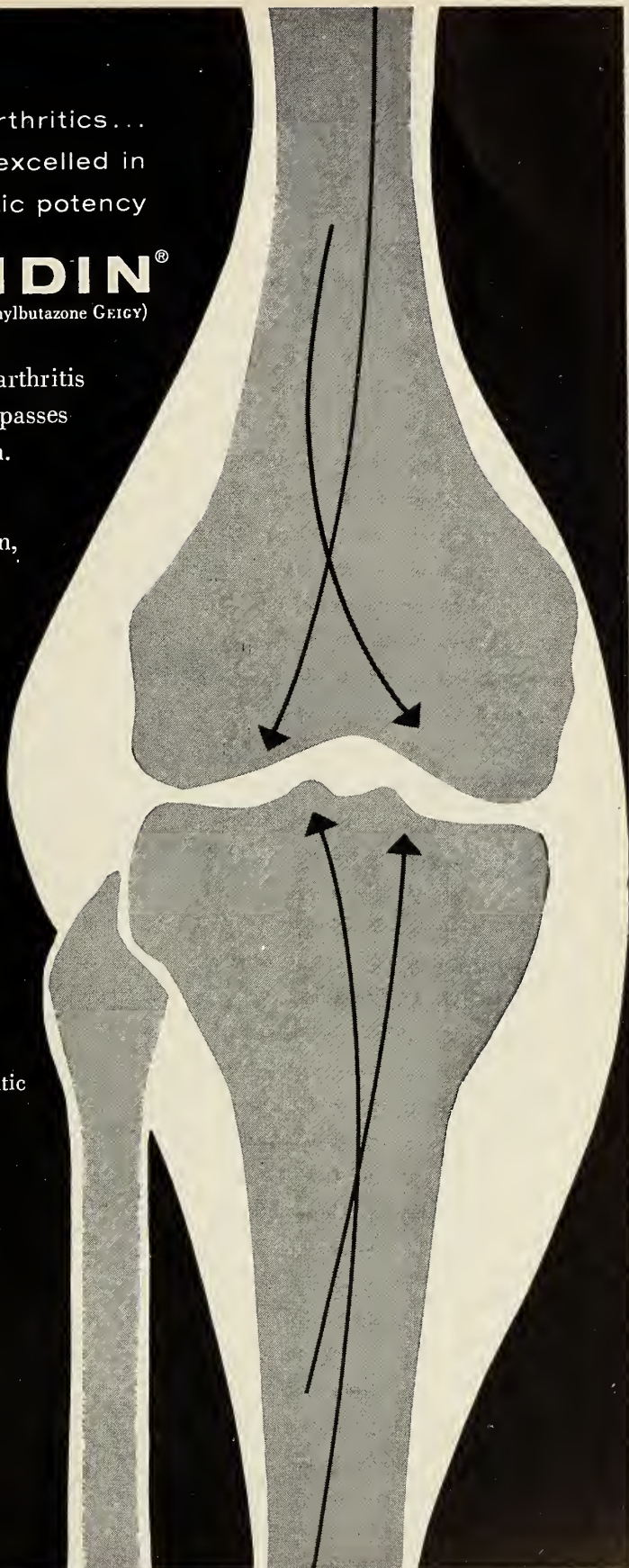
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Ardsley, New York



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control of
salt retention
edema

CUMERTILIN[®]
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Tablets

- effective oral diuretic with no significant gastrointestinal irritation¹
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- eliminates need for injections in certain cases, lengthens interval between injections in others
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1. Pollock, B. E., and Pruitt, F. W.: *Am. J. M. Sc.*, 226:172, 1953.

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(Continued from Page 522)

A novel exhibit at the Michigan State Fair featured two contests, each of them educational and challenging. What fairgoers liked best was that the *doctors offered cash awards* to contest winners.

Spotlights were trained on a sign inviting anyone to "Win a Silver Dollar" by naming a community in Michigan (population: 500 or more) that does not have a local resident doctor of medicine. Result? Only eighty-four silver dollars were given away, an indication that not many of the thousands in attendance had the right answer. The companion contest offered a \$100 savings bond to the most nearly correct guess on *the total number of medical men in Michigan*. That went to someone whose guess was almost right—8,206 instead of the correct total of 8,214.—*AMA Bulletin*.

* * *

INGHAM COUNTY MEDICAL SOCIETY

Twenty-ninth Annual "May Clinic"

The twenty-ninth annual May Clinic of the Ingham County Medical Society will be held at the Olds Hotel, Lansing, Michigan, on Thursday, May 2, 1957.

Registration opens at 1:30 p.m. A social hour beginning at 5:15 p.m. will be followed by a subscription dinner at 6:30 p.m.

Participants in this year's clinic include:

George V. Taplin, M.D., Research Physician, Atomic Energy Project, University of California at Los Angeles.

Subject: "Recent Developments of New Radioisotope Techniques for Measuring Liver and Kidney Functions."

Laurence H. Kyle, M.D., Associate Professor of Medicine, Georgetown University School of Medicine and Director, Metabolic Clinic and Laboratory, Georgetown University Hospital.

Subject: "Hypothyroidism and Hypometabolism."

Franklin G. Ebaugh, M.D., Clinical Professor of Psychiatry, University of Colorado School of Medicine, Denver.

Subject: "Depressive Reactions."

Willis J. Potts, M.D., Surgeon in Chief, Children's Memorial Hospital; Professor of Pediatric Surgery, Northwestern University, Chicago.

Subject: "Surgical Emergencies in the Newborn."

The after-dinner speaker will be:

C. Walton Lillehei, M.D., Professor of Surgery, University of Minnesota Medical School.

Subject: "Cardiac Surgery."

Advance reservations for the dinner, approximate cost \$5.00, may be made with William D. Hayford, M.D., Chairman, Program Committee, 609 North Washington, Lansing, Michigan.

* * *

The new Midwest Institute on Alcohol Studies will hold its second annual session in Kalamazoo, June 24 to June 28, 1957. Co-sponsored by the Michigan State Board of Alcoholism, Western Michigan College, the University of Wisconsin, and the Wisconsin Council on Alcoholism, this course of study will bring to Michigan its first school of alcohol studies planned to acquaint professional people with the problems of alcoholism.

* * *

A new and safer rabies vaccine, produced in em-

(Continued on Page 526)

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(Continued from Page 524)

bryonated duck eggs, is now available to physicians and pharmacists. It has been shown in tests to be free of a "paralytic factor" that sometimes has caused paralysis and death during rabies treatment.

Found in conventional rabies vaccines made of rabbit brain tissue, the "paralytic factor" appears to be related to myelin, the covering of brain nerve fibers. The exclusion of myelin from the new vaccine is made possible by the use of duck embryos in processing.

* * *

The annual conference on Industrial Health will be held in St. Louis, Missouri, April 20-26, 1957. Michigan men presenting papers will be: John C. Soet, Michigan Department of Health; George Hanna, Detroit Department of Health; H. R. Hoyle, D. D. McCollister and V. K. Rowe, of the Dow Chemical Co., Midland; J. C. Radcliffe, Ford Motor Co., Detroit; K. E. Robinson, General Motors Technical Center, G.M.C., Detroit; and Helen DeCoursey, R.N., Kelsey-Hayes Wheel Company, Detroit.

* * *

American Academy of General Practice.—Are children's ears and feet neglected? Is a laboratory report always accurate? What's new in the world of tranquilizers? These and hundreds of other important questions were answered during the American Academy of General Practice Ninth Annual Scientific Assembly, March 25-28, 1957, in St. Louis Kiel Auditorium.

The Academy has more than 21,000 family doctor members and is the nation's second largest medical association. There were 25 prominent physician-authorities who appeared on the four-day scientific program, among them the following Michigan men: J. Lewis Dill, Henry Ford Hospital, Detroit, who will review diagnostic criteria, methods of treatment and rehabilitative procedures; Thomas Francis, Jr., M.D., Ann Arbor, who for months has been evaluating the effectiveness of the Salk polio vaccine program, and brought his report up to date.

Opening ceremonies included a call to order by Academy President Dr. John S. DeTar, Milan. This was followed by an invocation and welcoming address.

* * *

Plastics Industry.—The advertisements of the General Motors Corporation in the last several weeks have featured the efforts of John S. DeTar, M.D., Milan, to bring a plastics industry to Milan.

* * *

The Wayne State University Medical Alumni Association will hold its 71st Annual Alumni Reunion and Clinical Program Tuesday and Wednesday, April 30 and May 1, 1957. The "Clinic Days" will be climaxed by an Alumni Reception and Banquet in the main dining room of the Hotel Fort Shelby.

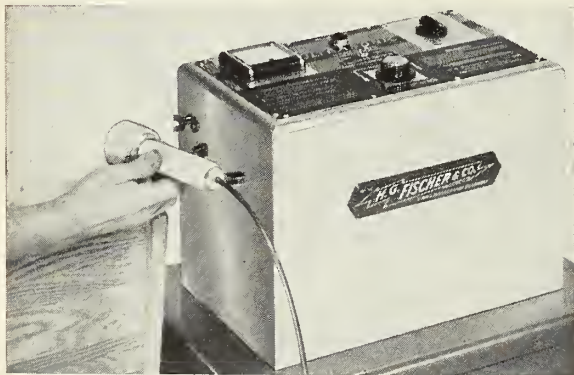
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(Continued on Page 528)

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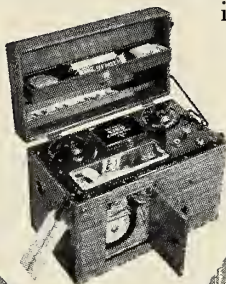
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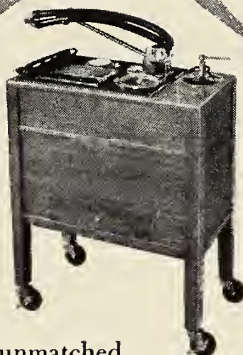
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(Continued from Page 526)

American Medical Association, is presenting an intensive week end course in Clinical Hypoxia, beginning March 1 and ending June 8, 1957. These courses have been presented monthly in New York City as well as in southern, mid-western and western cities. More than 1,000 physicians and dentists have received personal instruction in exposing the death zone of the respiratory tract. Further information may be obtained by writing to the Secretary, N.R.S., Inc., 2 East 63rd St., N.Y.C. 21, N. Y.

* * *

Clifford D. Benson, M.D., Detroit, was one of the guest speakers at the November 13 and 27 meetings of the Indianapolis (Marion County) Medical Society in the White Cross Guild auditorium at Methodist Hospital. The subject of Dr. Benson's talk was "Anomalies of the GI Tract in the Newborn and Infant."

* * *

"Clinical Memoranda on Economic Poisons."—The United States Public Health Service has prepared the latest revised edition of "Clinical Memoranda on Economic Poisons," and it is being distributed by the National Agricultural Chemicals Association as a public service to doctors, hospitals and poison information centers. Copies of this booklet are available on request from the National Agricultural Chemicals Association, 1145 Nineteenth Street, N.W., Washington 6, D. C.

The University of Pittsburgh School of Medicine Department of Surgery and Section on Anesthesiology announces a postgraduate symposium on "The Basic Sciences Related to Anesthesiology," June 10-14, 1957, at Hotel Webster Hall, 4400 Fifth Avenue, Pittsburgh 13. For registration and full particulars write Chairman of Committee on Postgraduate Medical Education, 3941 O'Hara Street, Pittsburgh 13, Pa.

* * *

The American Foundation for Allergic Diseases announces the availability of three Fellowships in Research and Clinical Allergy, for a period of two years each, carrying a stipend of \$4,500 for the first year, \$4,750 for the second, plus a total of \$750 for laboratory and travel expenses during the two-year period. Applications must be received by May 10, 1957. Write Frederick G. Germuth, Jr., M.D., The Johns Hopkins University Medical School, Baltimore 5, Maryland.

* * *

The American Goiter Association's annual meeting will be held at the Hotel Statler, New York, May 28-30, 1957. For program and information write John C. McClintock, M.D., Secretary, 149½ Washington Avenue, Albany 10, New York.

* * *

Cancer talks sponsored recently by the Michigan Cancer Co-ordinating Committee include: George H. Ruggy, M.D., Grand Rapids, before the Muskegon

(Continued on Page 530)

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(Continued from Page 528)

County Medical Society, March 15, on "Early Diagnosis of Cancer."

James H. Beaton, M.D., Grand Rapids, before the Manistee County Medical Society, May 6, on "Early Diagnosis and Treatment of Cancer of the Cervix." James A. Ferguson, M.D., Grand Rapids, before the Northern Michigan Medical Society, May 9, on "Early Diagnosis and Management of Cancer of the Large Intestine." Howard G. Benjamin, M.D., Grand Rapids, before the Allegan County Medical Society, March 12, on "Early Diagnosis and Management of Malignancy of Large Intestine." James G. Watt, M.D., of Toronto, Canada, before the Kent County Medical Society, May 14, on "Chemotherapeutic Treatment of Advanced Cancer." William T. Collins, M.D., Grand Rapids, before the Edmore Schools and Community Health Council of Edmore, Michigan, April 12, on "The Nature of the Cancer Problem Today."

* * *

The American College of Chest Physicians will hold its twenty-third Annual Meeting at the Hotel Commodore, New York, May 29-June 2, 1957. For program write ACCP, 112 East Chestnut Street, Chicago 11, Illinois.

* * *

The International Voice Conference will be held in Chicago, May 20-22, following the International Congress of Otolaryngology (to be held in Washington, D. C.). Subjects treated each day will be: (a)

Research on Physiology of Voice Production; (b) Clinical Procedures in Diagnosis and Training; (c) Relation of Hearing to Voice.

For information and detailed program write Hans von Leden, M.D., 30 North Michigan Avenue, Chicago 2, Illinois.

* * *

Cerebral Palsy Clinics will be held by Meyer A. Perlstein, M.D., of Chicago, for the Michigan Society for Crippled Children and Adults and the Michigan Crippled Children Commission on April 30 and May 1 in Flint, Michigan.

* * *

John R. Rodger, M.D., Bellaire, is the author of a feature article published in *Parade* magazine of February 24 entitled "How to Avoid Falling Asleep at the Wheel." Dr. Rodger is Chairman of the Committee on Study of Prevention of Highway Accidents of the Michigan State Medical Society. *Parade* magazine has a circulation of 17,500,000 in the United States.

* * *

Tuberculosis death rates generally are high in the large cities. Cities of 100,000 population and over have a tuberculosis death rate approximately 80 per cent higher than that of the remainder of the country.—ROBERT J. ANDERSON, M.D., Public Health Reports, February, 1956.

* * *

Traffic deaths for Michigan in 1956 were 276 lower than for 1955, and 89 lower than for the average of the

(Continued on Page 532)

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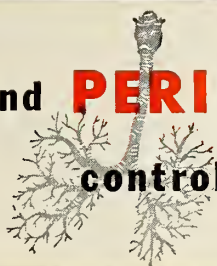
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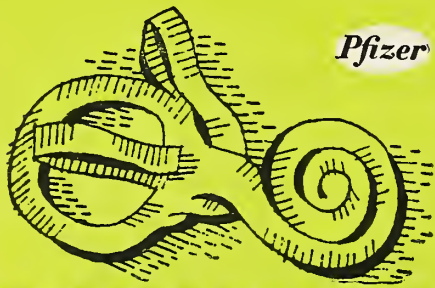
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(Continued from Page 530)

5-year period 1951-55. The 1956 toll was 1,728 as compared to 2,004 for 1955. Michigan was the only industrial state to show a substantial decrease in traffic deaths in 1956.

The State Safety Commission has picked a goal for the state of a reduction of 10%, or 174 persons under the 1956 figures for the current year. If achieved, this will get our fatality-per 100 million mile rate in close conformance to that of New York and Pennsylvania, which have the best records of the larger states.

* * *

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Saturday, June 15, 1957

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* * *

MEDICAL TELEVISION SHOWS

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WJBK-TV, Detroit

February 3—Subject: How the Doctor Examines Your Heart—Guests: John G. Bielawski, M.D., E. A. Irvin, M.D., and Ernest Guy, all of Detroit, and E. H. Wiard, Lansing.

February 10—Subject: Operation Armor—Guests: Arch Walls, M.D., Detroit and Otto K. Engelke, M.D., Ann Arbor.

February 17—Subject: M.D. Qualities (Film, "Even For One").

February 24—Subject: Fire Safety (Film, "Too Young to Burn").

WKAR-TV, East Lansing

February 14—Subject: Child Dental Health—Guests: Robert L. Overholt, D.D.S., East Lansing, H. E. McClenathan, D.D.S., Robert W. Root, D.D.S., and John Root, all of Lansing.

February 28—Subject: Responsibility for Alcoholics—Guests: T. Sidney Conover, M.D., Flint, Virginia Schroeder, Highland Park, Barbara Soderquist, Lansing, Rev. Walter Geske, Howell, Ralph Daniel, Lansing, and "John," Grand Rapids.

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PAUL I. ROBINSON,
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Dear Dr. Haughey:

On behalf of the Michigan Committee on Trauma I want to thank you very kindly for your generosity in offering the facilities of the Michigan State Medical Society JOURNAL for papers from the Trauma Committee last year.

I placed the August issue of the State Journal in my annual report to the National Committee and was extremely pleased when the National Committee gave the Michigan report first place in the nation.

Detroit, Michigan
February 11, 1957

HOMER M. SMATHERS, M.D.
Chairman, Michigan Regional
Committee on Trauma

Dear Dr. Haughey:

I have just received my copy of the January issue of THE JOURNAL OF THE MICHIGAN STATE MEDICAL SOCIETY. To say the least, we in the Michigan Heart Association are indeed grateful to you for your splendid co-operation in making this issue on our Association and its activities available. It was a real pleasure getting the material together for you, and I wanted to take this opportunity to express our sincere appreciation for your generosity in this matter.

Detroit, Michigan
February 13, 1957

ERNEST T. GUY,
Executive Director
Michigan Heart Association

Dear Dr. Haughey:

I wish to take this opportunity of personally thanking you for your many courtesies and for your co-operation in the development of the January (Heart) number of the JOURNAL for this year. I felt that this was an outstanding issue and hope that you, too, were pleased with it. You might be interested to know that we are already at work on attracting high quality papers in this field for the next Heart issue.

Detroit, Michigan
February 22, 1957

JOHN G. BIELAWSKI, M.D.
Medical Director
Michigan Heart Association

A PAGE FROM MEDICAL HISTORY

(Continued from Page 488)

4. Encyclopaedia Britannica.
5. Finegan, Jack: Light From the Ancient Past. The Archeological Background of the Hebrew-Christian Religion. Princeton, N. J.: Princeton University Press, 1948.
6. Guthrie, Douglas: A History of Medicine. Philadelphia: J. B. Lippincott Co., 1946.
7. Holy Bible: Old and New Testaments. King James Version.
8. Meek, T. J.: Hebrew Origins. New York: Harper and Bros., 1936.
9. Williams, M. O.: Home to The Holy Land. National Geographic (Dec.) 1950.

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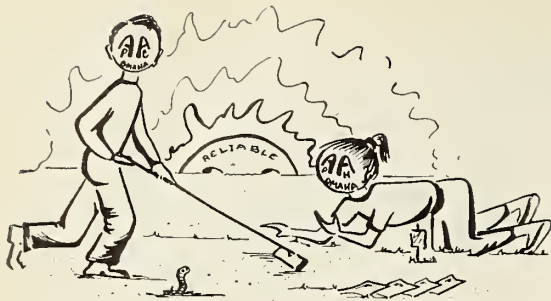
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BOOKS RECEIVED

LITERATURE REVIEW CIBA. Produced by the Medical Information Service for internal circulation. Vol. I, No. II. Basle: November, 1956.

CLINICAL MEMORANDA ON ECONOMIC POISONS. Prepared by Technical Development Laboratories, Technology Branch, Communicable Disease Center, P.O. Box 769, Savannah, Georgia. (Revised April 1, 1956). U. S. Department of Health, Education, and Welfare. Public Health Service, Bureau of State Services. This information has been reproduced as a public service by National Agricultural Chemicals Association.

UNITED STATES ATOMIC ENERGY COMMISSION. Twenty-first Semiannual Report of the Atomic Energy Commission. Washington, D. C.: United States Government Printing Office, 1957.

THE MENTALLY RETARDED PATIENT. By Harold Michael-Smith, Ph.D., Chief Clinical Psychologist, Flower and Fifth Avenue Hospitals, New York; Research Associate in Pediatrics, New York Medical College; Consulting Psychologist, City of New York, Children's Center, Bureau of Child Welfare; Consultant, United Cerebral Palsy Association; Adjunct Professor, Graduate School, Long Island University. Philadelphia, Montreal: J. B. Lippincott Company, 1957. Price \$4.

THE ROCKEFELLER FOUNDATION ANNUAL REPORT, 1955. 49 West 49th Street, New York.

OCCUPATIONAL HEALTH NURSING. By Mary Louise Brown, R.N., M.A., Assistant Professor of Public Health, Yale University School of Medicine, in association with John Woster Meigs, M.D., Associate Professor of Public Health, Yale University School of Medicine. New York: Springer Publishing Company, Inc., 1956. Price \$4.50.

This very interesting book describes the application of public health principles and medical, nursing and engineering practice for the purpose of promoting, conserving and restoring the effectiveness of workers through their place of employment.

It aims to orient the student nurse or the graduate who is interested in a career in industry, and it also gives standards and plans to guide the practicing occupational health nurse.

The book deals with the field and scope of occupational health nursing, functions of the program and the participation of the nurse as regards industrial hygiene and safety; workmen's compensation; labor unions and health services; special programs of dental health, hearing and eye programs, older workers, problem drinkers and problems pertaining to women workers; first aid, etc. There is also a discussion of part-time occupational health nursing service to a small plant.

NOTES ON ATOMIC ENERGY FOR MEDICAL OFFICERS. An Introduction to the subject for Service and other Medical Officers who may be concerned with defence against atomic bombs and similar problems. By The Royal Navy Medical School. 169 pages. Hampshire, England: Alverstoke, 1956. New York: Philosophical Library. Price: \$4.75.

This is a small book of 169 pages prepared by the staff of the British Royal Naval Medical School. The first chapter is a review of introductory physics beginning with the simple electric circuit and electrons while other chapters deal with the physics of x-rays, atomic structure, natural radioactivity, transmutation of elements (basis for the cyclotron), ionization and release of atomic energy.

There is further discussion of what happens when an atomic bomb explodes, the effects of radiations on cells and on the body. From a more practical standpoint, the treatment of radiation casualties, monitoring instruments and protection against radiation are dealt with.

CIBA FOUNDATION SYMPOSIUM ON PAPER ELECTROPHORESIS. Editors for the Ciba Foundation—G. E. W. Wolstenholme, O.B.E., M.A., M.B., B.Ch., and Elaine C. P. Millar, A.H.-W.C., A.R.I.C. Boston: Little, Brown and Company, 1956. Price \$6.75.

This is another of a long list of Ciba Foundation Symposia. Since 1948, this International Foundation has been gathering groups of scientists interested in medical or chemical research, in London for a two-day to four-day intensive conference with prepared papers and informal general discussion.

This particular conference met on July 27-29, 1955, with twenty-one present, and twenty-one prepared papers are published herewith. There are three from the United States.

The context is completely scientific, factual, and the discussion developed many interesting angles. This Symposium features the use of paper in electrophoresis.

CONNECTIVE TISSUE IN HEALTH AND DISEASE. Edited by G. Asboe-Hansen, M.D., Connective Tissue Research Laboratory, University Institute of Medical Anatomy, Copenhagen. Copenhagen: Ejnar Munksgaard; New York: Philosophical Library, 1957. Price \$15.00.

This is a very comprehensive and thorough review of a subject which has come into prominence in recent years. The twenty-three contributors live in various parts of the world giving the book an international viewpoint. New thoughts on healing, infection, cancer invasion and aging processes are brought out. For the physician in private practice, the details presented regarding connective tissue morphology, histochemistry of connective tissue, ground substances and collagen, metabolism of the mucopolysaccharides and sulphate exchange may not be too interesting. But the chapters on aging, wound healing, influence of hormones and infection, arteriosclerosis and collagen diseases will be of more practical use. There are chapters pertaining to Dermatology, Ophthalmology and Rheumatology.

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(Continued from Page 514)

Robert Joseph McClellan, M.D., seventy-six, Detroit physician for forty-seven years. A graduate of the Detroit College of Medicine, he was a member of the Wayne County Medical Society and a Life Member of the Michigan State Medical Society. He died January 20, 1957.

* * *

Harold G. McLean, M.D., sixty, Detroit physician and vice chief of surgeons at Grace Hospital. A native of Wheatley, he graduated from the Detroit College of Medicine in 1920 and practiced in Detroit for thirty-seven years. He was a member of the Wayne County Medical Society. He died February 8, 1957.

* * *

Robert S. Taylor, M.D., thirty-five, Bay City physician for six years. Born in 1921 in Lansing, Michigan, he was a graduate of the University of Michigan Medical School. Doctor Taylor was a member of the Bay-Arenac-Iosco County Medical Society. He died August 2, 1956.

* * *

Edward C. Warren, M.D., eighty-six, retired Bay City physician. Born in 1870 in Canada, he was a member of the Bay-Arenac-Iosco County Medical Society and of the Michigan State Medical Society. He died August 13, 1956.

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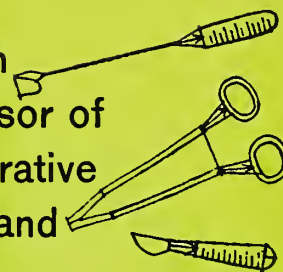
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The "Blue Cross investigation bill" that had been adopted unanimously by the Indiana Senate, was adopted by the House this month without a dissenting vote.

The bill established a special, non-partisan, joint house-senate committee to "conduct a study of the operations of all companies or associations or others engaged in the business of providing hospitalization or prepaid hospital expense plans."

The resolution itself does not specifically mention Blue Cross, but it was introduced by Senator Townsend, who had been previously quoted following an announcement of Blue Cross rate increases as saying that "perhaps the whole situation needs investigating." As a result the bill has been tagged in the press as a "Blue Cross Probe."

The resolution calls for the special committee to file a report with the legislative advisory commission on or before September 15, 1958, for transmission to the next session of the assembly, which will open January, 1959.—National Underwriter, March 14, 1957.

DOCTOR AMENDMENT TO DRAFT ACT

The Defense Department preparing for expiration of the special doctor draft act next June 30, is moving ahead with legislation to amend the regular draft act so that physicians may be called up selectively. The bill is now before the Budget Bureau, which is expected to clear it soon for presentation to Capitol Hill.

The proposed amendment, in effect, would waive the Selective Service Act's prohibition against discrimination to the extent that physicians, dentists and allied scientists could be called up by their professional classification. Thus these men, because they are in the particular professional groups, would be subject to special calls and not necessarily inducted in the same order as others in their same age group.

One phase of the situation that is causing some concern in the medical profession is the possibility that June 30 will see the end not only of the special doctor draft act, but also the expiration of the National Advisory Committee to Selective Service (the Rusk committee) and its affiliated volunteer state and local committees. The Defense Department Amendment setting up the new doctor procurement mechanism under the regular draft has no provision for continuing the committee. Selective Service had not recommended retaining the committee.

The national, state and local committees, made

up of physicians and dentists, have been the liaison between the military services and Selective Service on the one hand and the medical professions and medical schools on the other.—AMA Washington Letter.

CHANGES IN "INTERMEDIARY" HOME-TOWN SYSTEM

It is neither the desire nor the intention of Veterans Administration to eliminate the "intermediary" system for administering the home-town care program, an arrangement in which a third party (a state medical agency) receives billings and makes payments. This was the gist of a statement by VA's chief medical director, Dr. William S. Middleton, at a Washington meeting attended by representatives of eight states and Hawaii, where the "intermediary" system remains in effect. Also present were representatives of the AMA's Washington Office and the national Blue Shield. Dr. Middleton said he felt sure that by mutual consideration of the problems involved agreement could be reached that would be acceptable to all. It was decided that contracts would be continued, based on the following major points:

1. Contracts uniform for the eight states and Hawaii, and generally modeled on the Michigan state plan.
2. Authorization for extended care treatment to be made by VA, with a copy of the authorization going to the contractor.
3. Contractors to continue their audits and receive invoices (doctors' monthly bills) with medical reports.
4. Physicians' summary reports, generally quarterly, to go directly to VA.—AMA Washington Letter, March 29, 1957.

(The eight states are California, Colorado, Michigan, North Carolina, Oregon, South Dakota, Washington, and Wisconsin.)

ANNUAL MEDICAL GOLF TOURNAMENT

The American Medical Golfing Association will hold its forty-first tournament June 3, 1957 at the well-known Westchester Country Club, Rye, New York. It is a championship layout, with beautifully cared for greens and fairways. This famous resort provides two eighteen-hole courses, a Beach Club on Long Island Sound, tennis courts and even a polo field.

As in the past few years, eighteen-hole competition will determine championships and will be the basis for the awarding of prizes. The New

(Continued on Page 554)

Harmonyl*

(Deserpidine, Abbott)

quilizer. For instance, following an eight-month study of
omic, hospitalized mental patients, Ferguson¹ reported:

Harmonyl benefited at least 15% more overactive patients
on oral reserpine.

Harmonyl was more potent in controlling aggression,
requiring only one-half to two-thirds the dosage of reserpine.

A number of patients experiencing side reactions on
reserpine were completely relieved when changed to Harmonyl.

In this summary Ferguson concluded: "*The most notable im-
provements were the absence of side effects and relatively rapid
onset of action with Harmonyl.*"

Harmonyl in hypertension

Hypertension studies show that the average reduction in blood
pressure obtained with Harmonyl compares closely to that ob-
tained with reserpine. The tranquilizing effect of the two drugs
appeared similar, except that few cases of giddiness,
dizziness, sense of detached existence or disturbed sleep were
observed with patients receiving Harmonyl.

Dosages In mild anxiety, as little as 0.1 mg. of Harmonyl a
day may be effective. In institutionalized psychiatric patients,
less than 2 to 3 mg. a day is likely to be beneficial.

Mild essential hypertension, treatment may be started with
0.25-mg. tablet three or four times a day. After about ten
days (or sooner, depending upon response), dosage may be re-
duced. A maintenance dose of 0.25 mg. daily is often sufficient.

Precautions, As with other forms of rauwolfia, Harmonyl
must be used cautiously in peptic ulcer and epilepsy and in
patients about to undergo surgery or electroshock treatment.
Despite infrequent reports involving depression, patients with
a history of depressive episodes should be watched carefully.

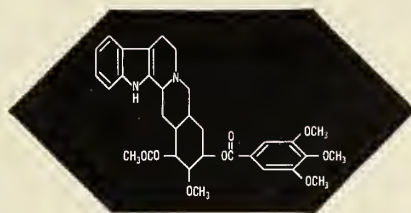
Professional literature is available upon request.

Supplied: Harmonyl is supplied in
1-mg., 0.25-mg. and 1-mg. tablets.

Abbott

Reference: 1; Ferguson, J. T.: Comparison of Reserpine and Harmonyl in Psychiatric Patients:
A Preliminary Report, *Journal Lancet*, 76:389, December, 1956.

*Trademark



795147

ANNUAL MEDICAL GOLF TOURNAMENT

(Continued from Page 550)

York Committee, headed by James T. Daniels, M.D. has made excellent arrangements for a full day of good golf and relaxation for all golfing medics.

The Westchester Country Club located some thirty miles from Grand Central Station, can be easily reached by train or bus to Rye, or, if several golfers join together, by Carey Car Service or Rent-a-Car Service. Golfers wishing to have quarters closer to the Club can secure reservations at nearby hotels in Rye or Harrison, New York, or in Greenwich, Connecticut.

Tournament play will start at 8:30 a.m. Players may tee off up to 2:00 p.m. Buffet luncheon, banquet, prizes and green fees are included in the cost of the day's activities. The banquet will be served promptly at 7:00 p.m. followed by awarding of prizes. All male members of the American Medical Association are eligible to participate in the tournament. Notice of further details and advance registration card may be secured by writing Bob Elwell, 3101 Collingwood Blvd., Toledo 10, Ohio.

Players should present verification of their home club handicap, signed by their club secretary, otherwise handicap is set by the AMGA Handicap Committee.

The following New York doctors will assist Dr. Daniels, Walter Heldmann, Robert Warren, Leonard Goldman, Samuel Thompson and Frank La Gattula.

The AMGA is under the direction of the following officers: Joseph Corr, President, New York; Paul Wyne, First Vice President, San Francisco; John Growden, Second Vice President, Kansas City, Mo.; and D. H. Houston, Seattle, Permanent Chairman of the Advisory Committee.

SEVENTH AMERICAN CONGRESS
ON MATERNAL CARE

A comprehensive review of Complete Maternity Care will be presented by The American Committee on Maternal Welfare at the Seventh American Congress on Maternal Care (formerly known as the *American Congress on Obstetrics and Gynecology*) to be held at the Palmer House, Chicago, July 8-12, 1957.

The five-day Congress—under the leadership of F. Bayard Carter, M.D., Professor and Head of the Department of Obstetrics and Gynecology at Duke University, Durham, North Carolina, and Samuel B. Kirkwood, M.D., Commissioner of Public Health for the Commonwealth of Massachusetts and Professor of Maternal Health at Harvard Medical School—will present topics dealing

with the interprofessional approach to maternal and infant care. The Program Committee, composed of organizational representatives from obstetrics-gynecology, general practice, pediatrics, anesthesiology, nurse anesthesia, nursing, nutrition, public health, hospital administration, mental hygiene and social service, has developed a program to afford maximum opportunity for audience participation.

Speakers and registrants at the panel discussions, luncheons, round tables, breakfast conferences and Laymen's Forum will examine and pursue the questions: "WHAT is Complete Maternity Care?" "WHO Provides It?" "HOW is Complete Maternity Care Provided?"

Four thousand are expected to attend.

Further information can be attained by writing The American Committee on Maternal Welfare, 116 South Michigan Avenue, Chicago 3, Illinois.

NURSING SCHOLARSHIPS

The College of Nursing at Wayne State University recently announced that six scholarships for student nurses are again available for the 1957-1958 academic year.

Five Helen Newberry Joy scholarships are available to students in the metropolitan Detroit area, and an alumni grant is available to students throughout Michigan.

These scholarships offer \$850 to cover the major part of tuition costs for the eight semesters and one summer session of the basic professional program. The grants are offered on a competitive basis to selected students who wish to enter the College of Nursing in September, 1957.

Applicants face no age, sex, race or creed restriction when applying for the scholarships. For information, write Dean Katharine Faville, College of Nursing, Wayne State University.

HIGHLIGHTS OF EXECUTIVE
COMMITTEE OF THE COUNCIL

Meeting of March 12, 1957

- **Medicare Program.** Jay C. Ketchum reported that to date some 1,100 claims have been received; also that re-negotiation is necessary so that x-ray billings will be paid by Michigan Medical Service rather than by Michigan Hospital Service as at present. A letter from the Michigan Society of Anesthesiologists re Medicare was read and referred to Secretary Foster for reply.
- **Michigan Medical Service.** Executive Vice President Ketchum reported that the marked increase in utilization would force an increase in rates, soon. The Executive Committee notified Michigan Medical Service that so far it has no recommendations to Michigan Blue

(Continued on Page 556)

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smooth
muscle
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gets
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patients



Like oil on troubled waters...

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DONNATAL TABLETS
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DONNATAL ELIXIR (per 5 cc.)

Hyoscyamine Sulfate.....0.1037 mg.
Atropine Sulfate0.0194 mg.
Hyoscyine Hydrobromide..0.0065 mg.
Phenobarbital (¼ gr.).... 16.2 mg.

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Each Extentab (equivalent to 3 Tablets) provides sustained 1-tablet effects...evenly, for 10 to 12 hours — all day or all night on a single dose.

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provides superior spasmolysis

through provision of natural belladonna

alkaloids in optimal ratio, with phenobarbital



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HIGHLIGHTS OF THE COUNCIL

(Continued from Page 554)

Shield concerning the adoption of the revised \$5,000 Fee Schedule.

- **1957 Michigan Clinical Institute.** The record-breaking total of 3,247 persons registered at the March 13-14-15 MCI included 1,654 doctors of medicine. A report on the promotion of this meeting, developed and executed by the MSMS Executive Office, was reviewed.
- **1957 MSMS Annual Session, September 25-26-27 in Grand Rapids.** C. Allen Payne, M.D. of Grand Rapids was appointed as General Chairman for this Session. A page in the Annual Session Program, seeking the registrants' attitudes on the convention, was authorized.
- **The name of A. Hazen Price, M.D.,** of Detroit, was nominated to the Governor for the State Hospital Advisory Council. The names of William Bromme, M.D., Detroit, William M. LeFevre, M.D., Muskegon, and D. R. Smith, M.D., of Iron Mountain, were nominated, as MSMS representatives, to the Board of Trustees of Michigan Hospital Service.
- **Ethics.** The appeal of a member of the Wayne County Medical Society, from an order of discipline, was referred to the MSMS Ethics Committee.
- **Councilor Conferences,** which proved so successful in 1956, were authorized throughout Michigan for the summer of 1957.
- **Advisory Committee of Michigan Hospital Service.** The following names were nominated to Blue Cross for its proposed Advisory Committee: C. W. Colwell, M.D., Flint; L. Fernald Foster, M.D., Bay City; W. S. Jones, M.D., Menominee; W. M. LeFevre, M.D., Muskegon; J. D. Miller, M.D., Grand Rapids, and Ralph W. Shook, M.D., of Kalamazoo.
- **Documentary Film of New Wayne County Medical Society Building.** The Council Chairman appointed the following committee to develop this film: W. B. Harm, M.D., Chairman; L. J. Bailey, M.D., L. R. Leader, M.D.; A. E. Schiller, M.D., and W. W. Babcock, M.D., Ex Officio.
- **Legal Counsel Lester P. Dodd** presented opinions on (a) use of the word "clinic"; (b) a hospital problem in Oakland County.
- **House of Delegates Speaker Kenneth H. Johnson, M.D.,** Lansing, announced that he had called a special session of the MSMS House of Delegates in Detroit for Saturday, April 27, 1957, by request of The Council.
- **Committee Reports.** The following were reviewed: (a) Home Town Medical Care Program, meetings of January 26 and February 10; (b) Tuberculosis Control Committee, January 11; (c) Site Committee (special report of Chairman K. H. Johnson, M.D.); (d) Public Relations Committee, January 26; (e) Joint Committee to Meet with Michigan Society of Neurology and Psychiatry and Michigan Psychological Association, January 30; (f) National Defense Committee, January 30; (g) Venereal Disease Control Committee, January 31; (h) Michigan Cancer Co-ordinating Committee, January 31; (i) Rheumatic Fever Control Committee, February 6; (j) Comprehensive Prepaid Insurance Plans Committee, February 6-27 and March 6 and also joint meeting of February 6 with Committee on Michigan Medical Service and separate meeting of the latter committee on March 3; (k) Geriatrics Committee, meeting of February 7; (l) Advisory Committee to WCMS Documentary Film, February 7; (m) Rural Medical Service Committee, February 21; (n) Arbitration Committee, February 22; (o) Mental Health Committee, February 28; (p) Healing Arts Study Committee, February 10; (q) Liaison Committee with Michigan State Board of Registration in Medicine, February 21.
- **Proposed Fire Regulations for Hospitals**—report of L. A. Drolett, M.D., Lansing, was presented and received with thanks to Dr. Drolett for an excellent report.
- **American Medical Education Foundation.** Plan of promotion by Michigan Chairman C. E. Umphrey, M.D., Detroit, was considered, and a vote of thanks to Dr. Umphrey was placed on the minutes.

MEDICAL MEETINGS AND CLINIC DAYS

A list of known medical meetings and clinic days, sponsored by county medical societies and other physician groups in Michigan, follows:

1957

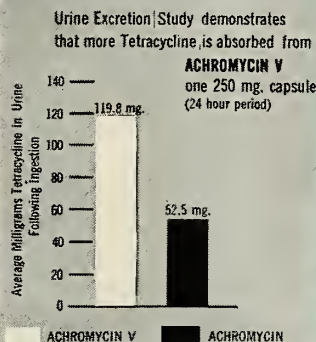
June 21-22	Upper Peninsula Medical Society	Calumet
July 11-13	Mid-Summer Session of The Council, MSMS	Mackinac Island
July 25-26	Coller-Penberthy Medical Conference	Traverse City
Sept. 25-27	MSMS Annual Session	Grand Rapids

the only one of its kind"

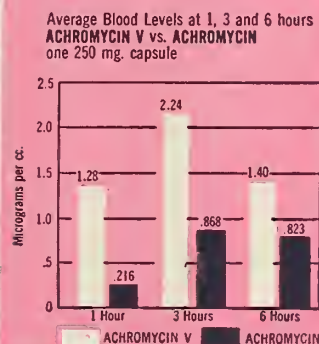
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 WITH SODIUM METAPHOSPHATE

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 for greater clinical
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GREATER ANTIBIOTIC ABSORPTION



FASTER BROAD-SPECTRUM ACTION



ACHROMYCIN V admixes sodium metaphosphate with tetracycline. ACHROMYCIN V provides greater antibiotic absorption/faster broad-spectrum action and is indicated for the prompt control of infections, seen in everyday practice, hitherto treated with other broad-spectrum antibiotics. Available: Bottles of 16 and 100 Capsules.

Each Capsule (pink) contains:

Tetracycline equivalent to tetracycline HCl.. 250 mg.

Sodium metaphosphate 380 mg.

ACHROMYCIN V dosage: 6-7 mg. per lb. of body weight per day for children and adults.

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What the Future Holds for General Practice

At the Symposium on Trauma in Lansing, Michigan, March 6, 1957, Austin Smith, M.D., Editor and Managing Publisher of *The Journal of the American Medical Association*, delivered a significant address at the noon luncheon. Approximately 400 members of the Michigan Academy of General Practice and their wives attended.

ical socialization, but stressed that organizations could do only so much.

"The footwork must be done by the individual members," he said. "In Sweden, the family doctor has ceased to exist. In Norway, physicians are limited in their use of drugs. In Japan, medical affairs are divided among various departments of the government with the result that the doctors are forced to follow a multitude of



(Left to right) Arch Walls, M.D., President MSMS and Moderator of Symposium; Austin Smith, M.D., Editor JAMA and Luncheon Speaker, "What the Future Holds for General Practice"; F. P. Rhoades, M.D., President-Elect MAGP and Chairman of Symposium on Trauma.

Dr. Smith stressed the fact that the future of the general practice of medicine rests primarily in the hands of the generalists. In other words, the future will be what the general practitioners of medicine work to make it. He pointed out that since the majority of practicing physicians of the country are general practitioners, it follows that the future of the general practice of medicine will be the future of the practice of medicine in general. He made a strong plea for all doctors and all segments of medicine to resolve their differences and join hands in a united front to prevent the catastrophe that has overwhelmed the profession in many other countries. As examples, he cited the current spectacle of the doctors of England having to threaten a strike in order to secure sufficient recompense to keep pace with the increased cost of living.

Dr. Smith's address is significant because, due to his position in organized medicine, it cannot but reflect the official thinking and attitude of the hierarchy of the AMA. He spoke of the work of the World Medical Association in combating med-

ical policies. In Chili, all doctors are state employees." Doctor Smith charged "the International Labor Organization and the International Social Security Organization, with offices in Geneva, Switzerland, are actively engaged in a concerted effort to bring about government control of medicine in all nations. If their program is adopted, all physicians would become mere technicians subject to the absolute control of government bureaucrats." He pointed out that "the W.M.A., of which the A.M.A. is a member, stands for (1) Freedom of choice of physician; (2) Freedom of choice of hospital; and (3) No restriction on type of medication used or mode of treatment by the physician."

Dr. Smith concluded by saying,

"As long as the family doctor continues to play a dominant role in the medical picture, he will, in a large measure, insure the survival of medical freedom."

Dr. Smith was introduced at the noon luncheon by Dr. F. P. Rhoades, Chairman of the Symposium. Dr. John W. Rice, President of the Michigan Academy of General Practice, moderated the morning session, and Dr. Arch Walls, President of the Michigan State Medical Society,

(Continued on Page 564)

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safety highlighted in every clinical report.

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ATARAX produces its calming, peace-of-mind effect without disturbing mental alertness. In the tension/anxiety conditions for which it is intended, you will find ATARAX effective in about 9 of every 10 patients.

prescribe ATARAX as follows:

Adults: usually one 25 mg. tablet, or two tsp. Syrup, three times daily.

Children: (over 3 years): usually one 10 mg. tablet, or one tsp. Syrup, twice daily.

Supplied: Tablets, tiny 10 mg. (orange) and 25 mg. (green), bottles of 100. Syrup, 10 mg. per tsp., pint bottles.

Since response varies from patient to patient, dosage should be adjusted accordingly. Prescription only.



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Heart Beats

HEART ASSOCIATION ELECTS OFFICERS

M. S. Chambers, M.D., a Flint internist, was elected President of the Michigan Heart Association on March 15, 1957, at the Association's annual board meeting which was held in Detroit at the time of the Michigan Clinical Institute. Dr. Chambers was one of the original incorpora-

tion. The Dodrill-GMR Mechanical Heart, which was designated one of the top ten scientific developments in 1952 by the National Association of Science Writers, was the first device of its kind in medical history to be used successfully on human patients undergoing heart surgery. Dr. Dod-



HEART ASSOCIATION HONORS CHARLES E. WILSON AND CHARLES F. BARTH
(Left to right) M. S. Chambers, M.D., Flint, looks on as Secretary of Defense Charles E. Wilson and Mr. Charles F. Barth, Jr., accept special honorary life membership plaques in the Association from E. A. Irvin, M.D., Dearborn. The presentations were made at the Association's annual dinner meeting held in Detroit, on March 14, 1957, in conjunction with the Michigan Clinical Institute. Mr. Wilson was honored for his efforts in organizing the Michigan Heart Association in 1948-1949 when he was head of General Motors. He served as Association Board Chairman for seven years. Mr. Barth, now ninety and a retired Chevrolet vice president, did not appear personally, but his son, Charles F., Jr., accepted his plaque. Mr. Barth has supported several heart research projects.

tors of the Association in 1949 and he has served on the Board of Trustees and numerous committees since that time. He is also serving a three-year term as a member of the Board of Directors of the American Heart Association.

F. D. Dodrill, M.D., a Detroit surgeon, who headed a medical and engineering research team which developed the first successful mechanical heart, was elected President-Elect of the Associa-

rill, also, was among the original incorporators of the Michigan Heart Association.

Mr. George A. Jacoby, GM Director of Personnel Relations and a former Flint resident, was re-elected for a second term as chairman of the Board of Trustees.

The retiring MHA President, E. A. Irvin, M.D., Medical Director of the Ford Motor Company,

(Continued on Page 564)

specifically for reduction of overweight



PRELUDIN[®]

(brand of phenmetrazine hydrochloride)

"...a highly effective and safe appetite suppressant..."¹

Based on clinical reports, PRELUDIN produces more than twice the weight loss achieved by patients receiving a placebo.² It is singularly free of tendency to produce serious side actions, as well as stimulation.¹⁻³ PRELUDIN imparts a feeling of well-being that encourages the patient to cooperate willingly in treatment.¹⁻³

The reduced incidence of side actions with PRELUDIN makes losing weight more comfortable for the average patient, facilitates treatment of the complicated case and frequently permits its use where other anorexiant are not tolerated.³

Recommended Dosage: One tablet two to three times daily one hour before meals. Occasionally smaller dosage suffices. On theoretical grounds, PRELUDIN should not be given to patients with severe hypertension, thyrotoxicosis or acute coronary disease.

(1) Holt, J. O. S., Jr.: *Dallas Med. J.* 42:497, 1956. (2) Gelvin, E. P.; McGavack, T. H., and Kenigsberg, S.: *Am. J. Digest. Dis.* 7:155, 1956. (3) Natenshon, A. L.: *Am. Pract. & Digest Treat.* 7:1456, 1956.

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GEIGY Ardsley, New York

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(Continued from Page 562)

was appointed chairman of the Community Service and Education Committee, one of the Association's major committees. He will continue to serve on the Board of Trustees and the Executive Committee.

Other Association officers elected were:

Vice President—Mr. Frank N. Isbey, Detroit
 Vice President—Mrs. James McEvoy, Detroit
 Vice President—Mr. J. William Hagerty, Detroit
 Vice President—Mr. Cyrus H. King, Detroit
 Vice President—Donald S. Smith, M.D., Pontiac
 Vice President—Milton Shaw, M.D., Lansing
 Secretary—Robert E. Fisher, M.D., Battle Creek
 Treasurer—Mr. Alfred T. Wilson, Detroit

The following persons were elected to the Board of Trustees for a three-year term:

Mr. Don Ahrens, Bloomfield Hills
 J. K. Altland, M.D., Lansing
 Mr. Earnest Bennett, Detroit
 Muir Clapper, M.D., Detroit
 Moses Cooperstock, M.D., Marquette
 Leon DeVel, M.D., Grand Rapids
 F. D. Dodrill, M.D., Bloomfield Hills
 Douglas Donald, M.D., Detroit
 H. M. Golden, M.D., Flint
 John Keyes, M.D., Pleasant Ridge
 Mr. Richard Krafve, Dearborn
 Mrs. Fred Miner, Flint
 Donald S. Smith, M.D., Pontiac

Members of the Board of Trustees elected to serve on the Executive Committee were:

M. S. Chambers, M.D., *Chairman*, Flint
 Paul S. Barker, M.D., Ann Arbor
 Sidney E. Chapin, M.D., Dearborn
 Warren B. Cooksey, M.D., Detroit
 F. D. Dodrill, M.D., Bloomfield Hills
 Mr. J. William Hagerty, Detroit
 E. A. Irvin, M.D., Dearborn
 Mr. Frank N. Isbey, Detroit
 Mr. George A. Jacoby, Detroit
 F. D. Johnston, M.D., Ann Arbor
 L. Paul Ralph, M.D., Grand Rapids
 Donald S. Smith, M.D., Pontiac
 Henry L. Smith, M.D., Detroit
 Frank Van Schoick, M.D., Jackson
 Mr. Alfred T. Wilson, Detroit

Dr. Chambers, following his election, made the following Standing Committee Appointments:

RESEARCH COMMITTEE

Donald S. Smith, M.D., *Chairman*, Pontiac
 F. D. Johnston, M.D., *Vice Chairman*, Ann Arbor
 Paul S. Barker, M.D., Ann Arbor
 Bert M. Bullington, M.D., Saginaw
 Muir Clapper, M.D., Detroit
 F. A. Coller, M.D., Ann Arbor
 Douglas Donald, M.D., Detroit
 John Keyes, M.D., Pleasant Ridge
 John Littig, M.D., Kalamazoo

COMMUNITY SERVICE AND EDUCATION COMMITTEE

E. A. Irvin, M.D., *Chairman*, Dearborn
 Sidney E. Chapin, M.D., *Vice Chairman*, Dearborn
 Muir Clapper, M.D., Detroit
 Robert E. Fisher, M.D., Battle Creek
 Scott T. Harris, M.D., Ypsilanti
 L. Paul Ralph, M.D., Grand Rapids
 D. Emerick Szilagyi, M.D., Detroit
 Silas Wiersma, M.D., Muskegon
 Mr. Paul F. Witte, Grosse Pointe

FINANCE COMMITTEE

Mr. Frank N. Isbey, *Chairman*, Detroit
 Mr. J. William Hagerty, *Vice Chairman*, Detroit
 F. D. Dodrill, M.D., Bloomfield Hills
 E. A. Irvin, M.D., Dearborn
 Mr. George A. Jacoby, Detroit
 Mr. Cyrus H. King, Detroit
 Donald S. Smith, M.D., Pontiac
 Henry L. Smith, M.D., Detroit
 Mr. Alfred T. Wilson, Detroit.

WHAT THE FUTURE HOLDS FOR
GENERAL PRACTICE

(Continued from Page 560)

was the moderator for the afternoon session. The six nationally known authorities who discussed traumatic injuries and their treatment were: Kenneth H. Abbott, M.D., Professor of Neurosurgery, Ohio State University; Edward J. Beattie, Jr., M.D., Professor of Surgery, University of Illinois; John H. Powers, M.D., Professor of Surgery, Columbia University; David M. Bosworth, M.D., Professor Orthopedic Surgery, New York Polyclinic; Allen S. Russek, M.D., Professor of Clinical Physical Medicine, New York University; and Harry H. Wagenheim, M.D., Director, Psychosomatic Service, Temple University.

At the conclusion of the scientific program, there was an elaborate cocktail party and reception, with strolling musicians, for the guest speakers, Officers of the Academy, and all registrants.

MSMS ANNUAL MEETING

September 25-26-27, 1957

Civic Auditorium, Pantlind Hotel,

Grand Rapids

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BEFORE

Reddened, fissured and excoriated perianal skin, and whitening of the anal folds, accompanied by intense burning and itching of 3 years' duration.

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therapeutic approach
with inherent safety
in **PRURITUS ANI**

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TOPICAL AMINO ACID THERAPY



AFTER

Same case after treatment with Hydrolamins. Note healing of the inflamed, fissured and excoriated areas and of the whitened anal folds.

Unique physiologic barrier—topical amino acids—brings rapid relief (98%¹) and complete healing (88%¹)

"...the objectives of therapy in pruritus ani can be listed under 3 headings:

- (1) **relieve itching:** [Hydrolamins produced immediate relief of intractable itching in 98% of patients. The antipruritic effect of one application lasts about twenty-four hours.¹]
- (2) **accelerate healing,** [Hydrolamins rapidly and completely healed reddened, fissured, macerated and ridged perianal lesions in 88% of cases.¹]
- (3) **allow natural healing without trauma due to physical, chemical, allergic, or microbiologic agents.**² [The amino acids of Hydrolamins promote safe, natural healing while the ointment protects the perianal area from irritation.¹]

Due to the rapidity of action of Hydrolamins, it is believed that protein-precipitating irritants, responsible for the pruritus, are neutralized. Hydrolamins also forms a biochemical barrier against further irritation.

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1. Bodkin, L.G., and Ferguson, E.A., Jr.: Successful Ointment Therapy for Pruritus Ani, Am. J. Digest. Dis. 18: 59 (Feb.) 1951.

2. Fromer, J.L.: Dermatologic Concepts and Management of Pruritus Ani, Am. J. Surg. 90: 805 (Nov.) 1955.

AMA Washington Letter

THE MONTH IN WASHINGTON

By approximately the mid-term point in its first session, the 85th Congress had shown enough interest in health legislation to hold a variety of hearings, but there was no evidence that many major bills would be passed before adjournment.

Actually, it was not until three months after the session opened that the Administration sent up to Congress two bills it regards as important—one would change the doctor draft act and the other would authorize small commercial companies to pool part of their resources to stimulate expansion and experimentation in health insurance.

Even then, the Department of Health, Education, and Welfare had not released its draft of legislation for federal grants to medical, dental and osteopathic schools for construction and equipment. On this, there was some reluctance to act until Capitol Hill had decided on the administration's bill for U. S. aid to general education.

Of all these bills, indications were that progress was assured on only one, that providing some revised arrangement for the selective draft of physicians, dentists and "allied specialists." The special doctor draft act, in effect for almost seven years, is scheduled to expire on July 1. Because Defense Department insists it still needs special authority to draft physicians and other professional health personnel by professional classification, the alternative was continuation of a modified doctor draft act or changing the regular draft act.

Meanwhile, a number of other bills had been studied at hearings. They include:

Changes in Medical Aspects of Civil Aviation Regulations.—Witnesses are widely divided on this measure that would set up an Office of Civil Aviation Medicine within the Civil Aeronautics Administration and give the Air Surgeon General who would head the office considerably more authority than now is exercised by U. S. medical officials in this field. There was no official sponsorship of this from the federal governmental level. It was opposed by the Department of Commerce (where CAA is located) and the Civil Aeronautics Board. However, support came from the outside, including testimony from Dr. Jan Tillisch of the Mayo Clinic, Dr. William Ashe, chairman of the department of preventive medicine, Ohio State University, and Dr. Herbert F. Fenwick, president of the Civil Aviation Medical Examiners. Dr. Tillisch headed an AMA ad hoc committee that had started a study of the problem, but he testified as an individual.

Veterans Medical Care.—The House Veterans Affairs Committee had held extensive hearings on a bill to further restrict admission of non-service connected cases to Veterans Administration hospitals, but there were no developments beyond that to encourage sponsors of this legislation.

Civil Defense Reorganization.—Here again a wide split developed at the hearings on just how to reorganize the federal government's participation in civil defense. The Administration wanted to strengthen the U. S. civil defense arm (the Federal Civil Defense Administration), but without going to the extent of making a cabinet-rank Department of Civil Defense, which is the goal of Chairman Chet Holifield (D., Calif.) of the subcommittee that had studied civil defense for more than a year.

Control of Barbiturate and Amphetamine Drugs.—The objective of bills before the House Interstate health subcommittee is to extend federal control to take in the manufacture, compounding, processing, distribution and possession of habit-forming barbiturates and amphetamines. This would be achieved by demonstrating that intrastate control of the drugs is essential to achieve interstate control, a philosophy advanced for years by some federal officials.

While manufacturers, compounders, processors and handlers would have to list their names and places of business with HEW and to maintain complete records, physicians would not have to comply with these regulations.

Pressures for economy that had been evident early in the session seemed to lose their effectiveness when Congress really set to work on the budget for the Department of Health, Education, and Welfare. Whereas in first (non-record) votes the House cut scores of items, it simply reversed itself when roll-call votes were demanded in the final go-around.

As an example, no reductions at all were made in funds for the research institutes, \$50 million was restored for grants to help build water pollution treatment plans, \$1.3 million was restored to the Food and Drug Administration. A \$5 million cut in money for general public health grants to states was sustained by the House—but this money will have to be provided later if the House

(Continued on Page 568)



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(Continued from Page 566)

estimate of the extent of the obligation proves too low.

Economy advocates tried without success in the House to cut \$21 million off money for the Hill-Burton hospital construction program.

While in theory the Senate is privileged to make its own cuts in a money bill coming to it from the House, in practice the Senators generally restore much of the money cut by the House and occasionally (as last year) vote large boosts over House figures. So the possibility now is for even higher health and medical budgets before the appropriations bills finally are enacted.

AMA NEWS NOTES

DAVID ALLMAN TO ASSUME PRESIDENCY IN JUNE

The American Medical Association's presidential oath of office will be administered to David B. Allman, M.D., of Atlantic City, N. J., in impressive ceremonies at 8:30 p.m., Tuesday, June 4, in the grand ballroom of the Waldorf-Astoria Hotel, New York. Besides Dr. Allman's inaugural address, the program will also feature musical selections by the United States Army Chorus, Washington, D. C.; remarks by out-going President Dwight H. Murray, M.D., of Napa, Calif., and presentation of the Distinguished Service Award to the recipient selected by the House of Delegates.

A portion of the inaugural ceremony—from 9 p.m. to 9:30 p.m.—will be telecast over New York station WABD, Channel 5.

Immediately following the ceremonies, Dr. and Mrs. Allman will receive physicians, exhibitors and guests at the annual reception in the east ballroom. The presidential ball will begin at 10 p.m. and continue until 1 a.m. in the grand ballroom.

CIVIL DEFENSE CONFERENCE IN JUNE

Medical aspects of radiation hazards will be the principal topic of discussion at the fifth annual National Medical Civil Defense Conference to be held Saturday, June 1, in the Sert Room of the Waldorf-Astoria Hotel, New York. Sponsored by the AMA's Council on National Defense, the one-day meeting has been designed primarily for representatives of state, local and national civil defense committees, physicians and other leaders of health and medical care facilities. A special feature of this year's program will be reports by Federal Civil Defense Administration officials on plans for handling national civil defense programs and meeting radiation hazards.

Also on the program will be presentations on the effects of radiation and the medical management of radiation casualties, an FCDA film on "Treatment of Nerve Gas Casualties," and an FCDA radiological exhibit.

Physicians planning to attend the AMA's 106th An-

nal Meeting are urged to come a day or two earlier for this worthwhile civil defense meeting. Further details may be secured from the Council.

WIVES PLAN BANG-UP NEW YORK SESSION

More than 3,000 physicians' wives are expected to gather at New York's Roosevelt Hotel, June 3-7, for the 34th annual convention of the Woman's Auxiliary to the AMA. An interesting program, combining business with pleasure, is being arranged by the committee on arrangements, under the direction of Mrs. Harry F. Pohlmann, Middletown, N. Y., and Mrs. Elliott V. B. Vurgason, Baldwin, N. Y. National committee meetings and round table discussions will be conducted June 1-3 with the formal opening of the convention slated for Tuesday morning, June 4.

Business sessions on Tuesday and Wednesday will be devoted to state and national committee reports and discussions of current health projects. Tuesday's luncheon, honoring past presidents, will feature an address on "Sick People in a Troubled World" by Dr. Howard Rusk, professor and chairman of the department of physical medicine and rehabilitation, New York University, Bellevue Medical Center.

Principal speaker at Wednesday's luncheon in honor of the president (Mrs. Robert Flanders of New Hampshire) and president-elect (Mrs. Paul C. Craig of Pennsylvania), will be Dr. Dwight H. Murray, immediate past president of the AMA. At this session, Mrs. Flanders will present the Woman's Auxiliary contribution to the American Medical Education Foundation, and Dr. George F. Lull, AMEF vice-president, will present AMEF awards to auxiliaries.

Election and installation of national officers will be held on Thursday morning with adjournment scheduled for noon. Climax of the convention activities will be the annual dinner for members, husbands and guests in the grand ballroom of the Roosevelt Hotel, Thursday evening. Mr. Allen Richard Foley, professor of history at Dartmouth College, will speak on "Vermont Humor."

The latest population figures for Michigan are 7,300,000, making her the seventh among the states. Michigan ranks fourth in tourist and resort business—\$600,000,000.

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Editorial Opinion

BLUE SHIELD LEAVES LOW-VAULTED PAST

In February, 1942, when the Council of the Massachusetts Medical Society approved the recommendation of the Committee on Public Relations to establish a fee table for Blue Shield service benefits, an income level of \$2,500 per family was set as a ceiling. Subscribers with family incomes over \$2,500 a year would be reimbursed up to the scheduled amount, and pay the surgeon the balance of his normal fee out of their own pockets.

This ceiling of \$2,500 family income was chosen, not on the basis of medical indigency or inability to pay, but as a selling device. It was necessary to enroll the largest possible number of persons. A study of family-income levels had shown that in the period 1935-1939, which was assumed to be "normal" (although actually it was a period of severe depression), 91.4 per cent of the wage-earning group had a family income of less than \$2,500 a year (40.6 per cent received from \$750 to \$1,000 a year, 42.8 per cent from \$1,000 to \$2,000, and 8 per cent from \$2,000 to \$2,500). Thus if enrollment of all families earning less than \$2,500 was permitted, 91.4 per cent of the wage-earning population (about 1,200,000 persons) could be included as a potential market for prepaid medical-insurance policies.

Instead of returning to "normal" after World War II, wages and prices continued to increase, and in February, 1947, the Council agreed to set the ceiling at \$3,000, in view of the higher cost of living, although no corresponding increase in fees (to correspond with the coincident increase in wages) was voted.

By 1950, it was apparent that something was wrong. At the February meeting of the Council figures were presented showing that in 1948 the number of families with incomes of less than \$1,000 had dropped from the 1935-1939 level of 40.6 per cent to 8 or 10 per cent, and that those with incomes of \$1,000 to \$2,000 had fallen from 42.8 per cent to about 14 per cent. The cost of living had gone up at least 6 or 8 per cent since 1935-1939, and wages had risen correspondingly, so that more than half the population now had annual family incomes between \$2,000 and \$5,000. To reach even 80 per cent of wage earners, service benefits would have to be extended to all persons earning up to \$5,000 a year.

A blue-chip group was therefore set up, and on February 1, 1950, the Council approved a secondary fee schedule of service benefits 50 per cent higher than the old one, for persons with incomes over \$2,500 but under \$5,000, to be known as

Plan B. This would cover 80 per cent of the population and only the 20 per cent with incomes over \$5,000 would be subject to additional charges by the surgeon, to meet his standard fee.

It is now again proposed to raise the family-income ceiling for service benefits to \$7,500, below which the physician will accept the Blue Shield fee as his total fee. The Executive Committee of the Massachusetts Medical Society (voting members of Blue Shield) have approved raising the ceiling to this figure, and the increase has been accepted by the Council.

Department of Commerce figures show that families with incomes under \$1,000 (as of 1955) constituted only 1 per cent of the population (as contrasted with 40.6 per cent in 1935-1939), and those with incomes of \$1,000 to \$2,000 only 3 per cent (as compared with 42.8 per cent of all families in 1935-1939). To reach 1,200,000 persons today, Blue Shield must cover 60 per cent of the working population. But 60 per cent of families now enjoy incomes between \$3,000 and \$15,000. Only 9 per cent have less than \$3,000 a year; 49 per cent have between \$3,000 and \$7,500, and 42 per cent have incomes in excess of \$7,500.

Average family income, which was \$2,340 in 1930, had risen to \$5,520 in 1955, an increase of 136 per cent. The cost of living rose over a similar period about 90 per cent.

Blue Shield fees to doctors under Plan A, in spite of these tremendous rises in family income and in the general cost of living, have remained constant, and until now there has been little change in the Plan B schedule since its authorization in 1950. Although the consumers' index shows an increase in cost of living of 12 per cent over the period 1950-1956, there has been no such general rise in Blue Shield Plan B fees.

Careful study and re-evaluation of cost-of-living indexes, fee schedules and subscribers' rates must accompany the proposed rise in the ceiling for service benefits to \$7,500. Otherwise, dissatisfaction with Blue Shield fees will continue to increase, and it will become increasingly difficult to explain to Blue Shield subscribers why their insurance does not cover their medical and surgical bills.

Fortunately, this process of study and re-evaluation is under way, and to some extent already in effect. For example, the Medicare table of fees, which the members of Blue Shield have accepted as a basis for a new Plan B schedule, includes instead of the meager current fees for medical (as distinguished from surgical) care, such items as

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Preventive Geriatrics

Importance of Good Nutrition and Exercise in the Aged

THE GERIATRICS Committee of the Michigan State Medical Society has by meeting, study, consultation and collaboration accumulated some important information and opinion that it feels should be made available to the men of medicine in the State of Michigan. This series began in 1954 with the first group article entitled "Preventive Geriatrics."

The Committee believes that its most important work is in the field of prevention. Since the concept of prevention stands out in the material to be presented, it was decided to continue the group article again under the heading of "Preventive Geriatrics." Instead of ranging through the entire field of medicine, as was done in the last article, it was decided to limit the discussion to nutrition, physical development, education and exercise. A panel discussion was conducted by mail between the members of the Committee and outstanding authorities in their respective fields. What follows is the thinking of this Panel. The members of the Panel and the Committee are appended.

A discussion of nutrition fits "hand in glove" with a discussion of physical exercise. In many of the opinions expressed below, there is a distinct overlapping of these two fields. This is the type of thing that we expect and encourage; but for purposes of simplification the first part of this paper will deal largely with physical education and physical exercise, the second part will deal with nutrition.

In the "Preventive Geriatrics" number of THE JOURNAL OF THE MICHIGAN STATE MEDICAL SO-

CIETY of May, 1954, Dr. Michael M. Dacso and Howard A. Rusk as a part of their contribution to the panel discussion offered the following:

"In a previous publication, 'Clinical Problems in Geriatric Rehabilitation'; one of us gave a practical, clinical classification of the geriatric patients who can benefit from rehabilitation:

1. Obviously handicapped patients (hemiplegia, arthritides, fractures, amputations, and neuro-muscular disease).
2. Those chronically ill without signs of manifest disability (chronic cardiac disease, chronic pulmonary diseases, et cetera).
3. The elderly persons who are not obviously ill, but have impaired physical fitness.

"It is in the third group that the preventive aspects of rehabilitation are presently most neglected. In many cases, the self-imposed, illogical and unnecessary physical inactivity, together with an insufficient diet will cripple the older patient without any underlying pathologic condition. The physical medicine and rehabilitation specialist is prepared to evaluate objectively the patient's physical capabilities and, if need be, improve them with properly applied and graded physical activities.

"A more intensive concentration on this third group of patients could prevent a great number of them from needlessly crossing the line between a useful and physiologic senescence and a useless and burdensome senility."

In the treatment of the above-listed groups, good nutrition, various types of mechanical devices and prosthesis and surgical procedures are necessary to bring a degree of improvement. The one item of treatment that is common to all three groups is graded, passive and active exercises to

improve the tone and the function of the parts affected. Accepting the last statement of the quotation, as an obvious truth, it would seem that an earlier application of the same principle to the youth of the land would be helpful in providing longer, more healthful years for the human body.

Dr. Laurence E. Morehouse of the University of California, participating in a radio broadcast entitled "The Sitting Man," aided in making the following contribution:

"Ring Lardner once said, 'The only exercise I get is when I take the studs out of one shirt and put them into another.' It can be assumed that this was intended as a facetious remark, but there are a good many American adults who could honestly match it with a record of physical activity not much more rigorous. The office worker in the big city rides to work in the morning by auto, streetcar, or bus. If he drives, he may lose his temper a few times, but that isn't exercise. At the office he sits at his desk most of the day. Perhaps his principal exertion is picking up the telephone. He rides back home in the evening, and reads the paper before dinner. After dinner, he may watch television, listen to the radio, read, or lie down on the sofa for a nap. On the week end his recreation often consists of taking a ride into the country—in an automobile.

"The increasing use of automobile transportation has worried some observers, and some years ago one prophet predicted that eventually our legs would wither away in a few generations if we didn't use them more. So far this hasn't happened, but apparently the modern conveniences have made some inroads on our general stamina. In a recent issue of the *New York Times*, Jean Mayer of Harvard University has stated flatly that Americans are getting soft. He points to the fact that rejection by the draft on grounds of general lack of fitness reached fifty per cent, and he says that American men are steadily growing heavier for their height and age—reflection of rich diet and easy living. Even children show this trend toward softness. Our success at sports can be partially written off when the small number of men on the football or baseball team is compared to the huge crowd sitting in the stands or slouched in an easy chair at home watching the little screen.

"If physical stamina and health were of no importance, the unfavorable statistics could be disregarded. But most people realize the need for keeping in reasonably good physical condition even if they don't do anything about it."

Farther along in the radio script it was pointed out that Dr. Morehouse had learned that young management executives in conference felt that the lack of physical fitness handicapped them in their deal with labor. They admitted that lack of stamina worked against them in long and grueling bargaining sessions with labor leaders. When they met these men across the bargaining table,

the labor leaders would bring up minor points in the proposed contracts and haggle over them for hours at a time. Although the executives tried to keep alert by drinking coffee from time to time, eventually they grew tired and reached the point of fatigue. It was then that the labor leaders introduced the critical bargaining points and forced the major concessions. When labor representatives were later asked about this strategic technique, they freely admitted that it was often used to great advantage. Both labor and management executives recognized that if they were in better physical shape, they might be better able to withstand physical and mental fatigue in the long bargaining sessions.

This problem raised the question of whether or not physical condition is a critical factor in the ability to preserve mental alertness and efficiency under stress. In an attempt to find the answer, a small research program was established in Harvard's Fatigue Laboratory using twenty professors as the subjects of the experiment. The men were first given a complete physical examination, which included the functioning of their nervous systems and blood circulation. Then they embarked on a prescribed program of light exercise, work, and rest. Attention was also given to such factors as proper nutrition.

Again the results were favorable. Part of the estimate of these results depended on subjective evidence—that is, the self-evaluations of the subjects engaged in the experiment. But measurements in the laboratory bore out this personal testimony. When the experiment began, the subjects were thrown off balance by the slightest stress. As the program progressed, it was found that the subjects reached the point where they could undergo certain amounts of stress without becoming mentally upset.

Dr. Morehouse found in this and in other experiments that many executives are as much a slave to routine and detail as the youngest apprentice in the business. They are adrift on an endless sea of paper work, and they never seem to reach shore. They accept whatever responsibilities are placed on them without any self analysis of their time or ability to fulfill them adequately. Thus they are constantly harassed and have little time for creative thought and effort. One of the results is that executives fail to take out enough time for recreation or for doing the things they really want to do. Often they

look forward to retirement as a time when they can do what they have always wanted to do. But, unfortunately, some of them never reach the retirement age.

Dr. Morehouse is a strong advocate of enjoying life as you go along, even though this requires a bit of organization and planning. It involves allowing time for rest periods and for reasonably leisurely meal times. And, it involves some attention to physical fitness, even if the time devoted to exercise is no more than two or three ten-minute periods a week. It isn't necessary for the sedentary white collar man to be in the same kind of physical condition as the professional football player. An office worker who attempted to keep in this kind of shape would be considerably overtrained. But his physical condition should be slightly in advance of his actual needs. Just as a baseball player can't keep in shape just by showing up for the games, neither can a file clerk stay in condition merely by opening and closing the files. There is no clear cut relationship between exercise needs and age. A person who has been accustomed to vigorous physical activity all of his life may still be as capable of exercise at seventy as the sedentary man of forty.

Dr. A. Hazen Price, Chairman of the Geriatrics Committee, in his introduction of the topic for discussion, had this to say regarding physical exercise:

"Even though there is overwhelming evidence to indicate that graduated, physical exercise is essential for the maintenance of a healthy body, there are very few people who regularly follow this practice. We all recognize that some form of activity out of doors stimulates the appetite and promotes more restful sleep. It provides a sense of well-being unequaled by any other type of exercise. When this type of activity is not possible, then some type of setting up exercise indoors helps increase total body metabolism as well as accelerate our general circulation, increase body temperature and prevent a great deal of mental sluggishness. Nerve tension is lessened, exercise serving as an outlet for pent-up pressure. We are all aware of what happens to the arm or leg kept immobilized too long in a cast. Sitting or standing for long periods without some activity creates a stiffness and aching of joints when motion is attempted. Early ambulation, postoperatively and following childbirth, decreases the period of convalescence, as well as lessening the likelihood of peripheral phlebothrombosis and pulmonary stasis. Less prolonged bedrest after cardiac infarction has likewise decreased the incidence of thrombo-embolic complications to say nothing of improving the patient's outlook psychologically.

"If we admit that these statements are true, would it be unreasonable to apply the principles involved in order that we keep well? It must be stressed that the type and the amount of exercise should be adapted to the age and physical fitness of the individual. If it is done in the form of recreation, particularly with one or two companions, it will not only improve muscular tone but also have an excellent tonic effect on morale. Exercise should be fun, and not done just because it is good for us.

"Those people who have always been active physically should be encouraged to continue some form of activity, regardless of age, decreasing, of course, the intensity of the physical effort with the years, or if disability intervenes. Some regular and systemic exercise each day will help the individual 'meet daily tasks with a better body and a more alert mind.'"

Dr. C. Howard Ross, a member of the Geriatrics Committee, adds:

"Activity brings joy to the heart and solace to the mind. In many rehabilitation programs, every muscle and joint, that has the power to wiggle, must be made to wiggle more, and eventually bring the patient to the level of self-care. With very few exceptions, there should be a daily physical exercise program for every one in this world."

Dr. C. Etta Walters of Department of Physical Education for Women of the Florida State University, Tallahassee, Florida, writes:

"During World War II, when bed space was limited and medical care needed to be expedited, we evoked a well known, but much neglected principal in exercise physiology, e.g., that structure demands function, while disuse promotes atrophy. Instead of prolonging the bed rest after the acute phases of treatment, patients were put on their feet as soon as possible and exercise was the usual recovery procedure. DeLorme's 'Progressive Resistance Exercise Program' came into vogue, and the work of Hellebrandt and Kabat as well as those of others did much to provide and explain the physiological mechanism upon which these exercises rest. Thus the physiological basis of the 'Overload principle' or 'Progressive Resistance Exercises' has provided the rationale for the treatment of the physically incapacitated and the maintenance and achievement of strength and endurance in the normal. This principal demonstrates that the organ systems of the body that are pushed to levels beyond those which can be easily met are the ones that develop the capacity to perform more efficiently. An experimental demonstration of this in regard to the cardiovascular system was performed by Christensen some years ago. He trained men to perform progressively heavier work on the bicycle ergometer and studied the heart rate and the stroke volume response. If, after having reached a constant value for heavier load the subjects returned to the lighter one, it was performed with a lower heart rate and a larger stroke

volume than when the same work had been performed initially. This is such a commonplace occurrence in the development of cardiorespiratory endurance and muscular strength that we are apt to ignore its implication for the importance of activity in daily living. The literature in the past ten years has pointed out some of the evils of prolonged bed rest and, therefore, has shown further the dangers inherent in inactivity.

"Inflexibility can be as incapacitating as can inadequate strength and endurance and some of the pains associated with advancing age can be trained to muscle tightness. Tight muscles can always cause irreversible changes in body structure and thus a functional defeat can become a structural one.

"Whether we exercise for the sake of activity or whether we do so by indulging in a favorite pastime which employs it, the important fact is that exercise when properly directed does increase the efficiency of the body in performing normal every day activities and enables it to meet emergencies with a minimum change in the homeostatic functions of the body. Although it is not essential, and sometimes inadvisable, that the older person indulge in strenuous activities of his youth, Jokl has shown that the deterioration of performance usually accompanying age can be prevented by regular training. We are conditioned by our interest and habits acquired in childhood and, therefore, it is important to develop early a love for activity and skills that will give to us good behavior patterns in terms of exercise in later life.

"It is important to educate the older person in the value of exercise and recreational interest. We must also provide opportunities for him to pursue such activities and our cultural pattern must recognize that senescence and inactivity are not synonymous."

Since the type and amount of physical exercise tolerated by any individual should be in the form of a prescription to fit that individual, and should be continued with appropriate modification throughout life, Dr. C. H. McCloy of the Division of Physical Education and Intercollegiate Athletics of the State University of Iowa thinks that "there should be more emphasis on medical examinations than is common at present." He suggests:

"First, I think that the medical societies should make a point of making clear to medical practitioners what it is that constitutes an adequate examination. I have had medical examinations myself covering the last twenty years, and some of them were so poor that they were not worth the time spent on them. Some were excellent.

I think that some practitioners either do not know what constitutes an adequate examination or they feel that they cannot charge enough for an examination to justify their giving it and, hence, give the individual examined the full sense of security although they do not do a thorough job. I think the medical society

could well go on record as to what constitutes an adequate physical examination.

"Along these lines, I think that one thing should be added to the examination, probably starting about the age of forty. This item is the examination for blood cholesterol . . . in view of the large number of deaths due to coronary occlusion, I think this item could very well be added. I realize that most practitioners in small communities have no facilities for analyzing the blood for cholesterol, but it is quite possible to draw the blood and preserve it and send it to the state laboratory.

"I think it would be a distinct service to indicate what aspects of a medical examination need to be done each year or oftener (for example, as one gets older, it is perhaps desirable that the prostate be examined every six months). Dr. C. Ward Crampton believes that certain aspects of the medical examination need not be done very frequently. Others need to be done with a great deal of care, quite frequently. It would seem that this possibility should be explored. If the same physician is doing the examination, has access to his previous records, a great deal of time and expense could be saved.

In this part of the panel discussion which had to do largely with generalities of the whole problem, Dr. Ernest D. Michael of the University of California said:

"If aging is concerned with both the physical and the mental processes, it seems that some form of preventive medicine should be tried that will stimulate the physical vigor as well as the mental desire for activity. This implies that the physical activity which I feel is necessary for healthful living, must be pleasurable. Of the many forms of physical activity, the best from the standpoint of interest usually concerns combination of exercise and a duty. Competition is found in almost all sports, particularly fishing, bowling, archery, etc. To combine exercise with duty involves a selection of activities, hiking, bicycling and garden activities, which takes a person outdoors in nature.

"A club or organization would be conducive to bringing together people of like interests so that they could participate in these physical activities.

"In addition to the above, there are other means to retard deterioration that recent studies verify. Weight-lifting, done to the rhythm of music might be used to glamorize a sometimes dull activity. Cold showers have been found to stimulate the circulation and reduce fatigue. This also may be a means to stimulate the mental activity and add to the picture."

Dr. Henry J. Montoye of the Michigan State University states:

"My field of interest is the physiology of exercise and I am very much interested in the role for regular physical exercise among middle-aged and older

people. There is no question in my mind that regular exercise of the proper intensities and duration can do much to postpone the deterioration which commonly occurs as the individual gets older. There are all kinds of cases in the sports world where amazing physical feats have been performed by people well up in years. We do not expect that the average man or woman will in the later decades of their lives accomplish similar feats, but some regular exercise, I am certain, could maintain the physical capabilities of these people at a very much higher level. Furthermore, I think that such regular exercise would affect not only the physical capacity, but their interest in other people and the world about them, their energy for doing mental work and in general, their vim and vigor for carrying out everyday activities.

"There are in the literature age curves permitting physical activities, as for example, a grip strength, flexibility, reaction time, et cetera. However, I am certain these curves can be modified with regular exercise, diet control and other activities. However, I think the two mentioned, namely, regular exercise and diet, can play the greatest part in preventive geriatrics.

"We have an experiment underway at the present time among middle-aged men who are very much out of condition. These data being collected will contribute to our knowledge in this area. However, I think the most dramatic effects of regular exercise among older people insofar as their physical capacities are concerned, will be demonstrated in the cardiovascular area and to a lesser extent in strength, flexibility, co-ordination, reaction time and certain other areas.

Dr. C. Etta Walters further adds:

"While physiologic involution is an inevitable concomitant of aging, proper or improper use of the body can delay or hasten the process in certain cases, and parts of the body. Incorrect body mechanics can cause unnecessary wear and tear. Although people probably stand in the most economical posture in terms of energy cost, it does not follow that they use the best mechanical principals in active postures such as lifting heavy objects, in carrying, reaching, pushing and other similar activities. The high incidence of slipped disks with their accompanying pain attest to this fact. Recent electromyographic evidence has shown that when the trunk is bent forward and a weight lifted, the erector spinae muscles do not participate in the lift, and other muscles of the lower trunk do not seemingly function. Thus the strain is borne by the intervertebral ligaments which cannot often stand the weight imposed. When the trunk is kept upright and centered over the object to be lifted or aligned with the direction of the reach, pull, et cetera, the leg muscles bear the brunt of the weight with help from the back muscles, thus relieving the tension on the ligaments.

"The capacity to maintain an effective homeostasis while performing work has been defined as a measure of physical fitness. Judicious physical training has

been demonstrated to contribute to the maintenance of a more effective homeostasis and there is no reason to believe that it is not as important in the aged as in the young. Physical activity with its resulting effects would have a bearing on any physical examination that included any response to physical stress. Thus, if one kept in good physical condition by exercise, it would be possible for him to maintain a certain degree of fitness with a less rigorous program as he became older.

"It has been known that the psychomotor skills that are developed early and kept in training can be retained by the aged to such a high degree that the older person can surpass a much younger age group in this skill.

"It would appear, therefore, that continued exercise of a skill can be of benefit to the aged as it is not lost, and since physical capacity and endurance can be maintained to a high degree in the aged by regular training, it would seem that exercise and training would be an attribute of all ages. Recreational hobbies such as fishing, gardening, or golfing, brisk walks, and countless others provide a means of maintaining a certain degree of acquired physical fitness. For those unable to participate in this manner, it would be advisable for them to indulge in some form of an exercise program even if within the confines of their home. Physical fitness and endurance can be developed by this method as well as a desirable amount of flexibility of muscles and joints maintained."

From the Department of Physical Education for Women at the University of Wisconsin, Dr. Lawrence Rarick opines that:

"The problem of the aging is at last receiving the thoughtful attention which it rightfully deserves. As has been frequently stated, the first twenty years of life are spent in gaining physiologic equilibrium, the next five to ten years in maintaining the peak level of physical efficiency, followed by the gradual, but continuous process of the physiologic deterioration. Our concern is to lengthen the span of optimal efficiency and retard the processes of physical deterioration.

"While much remains to be learned concerning the process of aging, we see its symptoms in many persons prior to the middle-adult years. While disease and hereditary factors cannot be disregarded as important factors in bringing on the characteristics of early aging, there is little question that little factors over which the individual has control may predispose him to this condition. A considerable body of evidence now points to unwise dietary habits and physical inactivity as factors which must be given careful consideration.

"There is an increasing body of evidence which indicates that a life of physical inactivity is detrimental to the health of men in the age range of forty-five to sixty-four. This is borne out by data reported by Morris in which it was found that the mortality rate from coronary heart disease for English males was more than twice as high for light workers as compared to

heavy workers in the forty-five to sixty-four age range. Similar, but not so dramatic, differences were found by Morris in regard to the mortality rate from diabetes. According to Krause, 80 per cent of low back pain among persons in middle-adult life is due to inadequate physical activity.

"If the aim of those responsible for guiding the health of the people in the middle and later years of life is to maintain a vigorous, active and productive life, then the importance of an exercise program, suited to the organic capacity of the individual should not be overlooked. Careful medical supervision must be emphasized and assurance given that the organic condition of the individual is appraised regularly. Studies of German men who were athletic in their youth, indicates that continuation of a physically active life can postpone many of the symptoms of aging by as much as twenty to thirty years, with apparently no harmful effect to the individual. These men were able to continue effective performance in their forties, fifties and some in their sixties and early seventies. While the evidence is not clear concerning the effects of exercise on longevity, there is strong support for the belief that the person will have a healthier, happy and more productive span of years late in life, by including a regular program of physical activity in his regimen of living."

Recognizing that this problem involves more disciplines than just the medical, Dr. Janet A. Wessel of Michigan State University writes:

"We need education in our schools and in our clinics for the development of the physical potential of mankind. This is the role of physical education in the schools, to provide guidance, direction, and opportunity for the development of the movement potential for all children. It should be the role of physical education to provide the same for adult education. Physical education should develop within each individual the concept of movement through the years . . . how it changes, the effect of physical activity upon the body, the mind and the motions, why movement or activity seemingly plays such an important part in total fitness or health, in that movement—efficient skillful movement—is not a way of life; but it is life. Movement should be understood from its earliest beginning, through childhood, adolescence, adulthood and the other years. Each person should be aware of his physical potential through the years. Each person should be physically aware of a feeling of being in good physical condition . . . being physically fit. And man must realize that to be truly educated, he must develop his potential in all aspects of his life . . . the mind, the body, the emotions and the spirit. We must begin teaching movement—not games or sports or dance. These things will come as the way of developing the physical potential of man. But games and sports and dance must never take the place of man's understanding of the fundamentals of all movement and the need for movement through the years.

"And what is of more importance to this whole picture is the way one moves . . . adherence to basic principles of movement is important at all ages, and plays a great part in the effect of movement upon the individual. I believe that two-thirds of the people must be taught and directed how to move with ease and grace . . . and this must be done in terms of the life of each individual . . . his particular problems and his inherited capacity. As far as glamour and exercise are concerned . . . what woman, regardless of age, is not interested in her form and figure? Her energies? What man, regardless of age, is not interested in his physique and proud of his muscular exploits as he grows older? His energies? Exercise . . . all movement should be approached from this angle, as well as efficiency and skill. However, I think that attacking the problem of the physical potential in the aging should not be from the prescribed exercise standpoint; but from the broader aspect of movement through the day and the year. I believe that a pamphlet should be put out on Movement Through the Years . . . how it changes . . . and maybe a series of articles on movement in the later years dealing with postural changes, muscular tone, efficiency, energies, movement principles, and ways to adapt yourself to the changing times . . . through your work, your hobbies, your interests, et cetera.

"Maybe some day a Movement Clinic will be set up for the aging to determine their movement needs in life of the total individual. A movement specialist will analyze the individual's total life situation and with consultation of the medical doctor, make recommendations for the improving of the physical potential of his patient . . . this should come from the medical doctor . . . but someone must show the individual how and give him opportunity to practice and this would be the physical educator and/or the physical therapist."

The value of sports to the individual is emphasized in an article titled "The Aging of Athletes and Athletic Longevity" by Dr. A. Bidon, translated from *Le Vieillessement Des Athletes Et La Longevite Sportive, Medicine, Education Physique Et Sport*, 2:187-198, 1949, translated by Ross Macnab. Dr. Bidon speaks of his own re-education by means of sports after being discharged from the military service with five major wounds and also his experience of intimate contact and physical examination and observation of some 150 veterans whom he studied, followed and advised. The following quotations from his article conveys the gist of his experience and thinking:

"One may conclude from these examinations that prolonged participation in sports has no detrimental effect on the body."

The men under observation at this time varied in age from thirty-five to sixty-five. Among the

older athletes that were examined. Dr. Bidon noted one point in common:

"All seemed to be fearful of overweight.

"At the onset of the forties or fifties, sport can be an extremely important means of therapy. It may be as a preventive, by strengthening the individual, or as a therapy in certain cases. What are the biggest enemies of people of all ages? They are overweight and cardiovascular or renal conditions.

"Participation in sport after age forty, therefore, must be very progressive. The individual must re-educate his skeletal muscles, as well as his heart, change his way of life, and readapt his body to physical effort.

"A similar danger exists in regard to vacations. So many people feel that they can regain in fifteen days at the beach or in fresh mountain air that which they have lost in 350 days of clogging up and stiffening. Result: The vacation ends with the individual in a horrible physical state. A word here to physicians who will supervise athletic neophytes. The vacation period should be a period of mental rest and discreet physical readaptation, and not a period of athletic debauchery.

"Excesses, such as overeating, causes a much heavier burden than does sport participation.

"I repeat what I said at the National Congress of Physical Education in 1914. Medical control of sports, so necessary in youth, is even more vital in old age."

Dr. Bidon further says:

"I owe much to sport which educated me, and which aided in my re-education after war wounds, just as it has rehabilitated many others. I am confident, on the basis of data I have collected—low blood pressures, the stronger hearts, the slow pulse rate and resistance to overweight—that sport is beneficial. One can easily see that the heart of an athlete will beat fewer times in a lifetime than a heart not conditioned by activity."

Ernest D. Michael of Santa Barbara College, University of California, finds that:

"Regular exercise programs have been found to enhance the body in regard to muscular strength, motor skills, and circulatory improvement. Increases in strength and motor skill has improved the efficiency of movement and helped prevent fatigue caused by physical exertion. The increase in muscular tone also aids the venous return of the blood which in turn augments the circulation. The improvement in circulation is reflected in the slowing down of the pulse rate during training, in the faster return to normal of the pulse rate after exercise and in the improved blood pressure response following the training program.

"Along with the general improvement in fitness, a sense of well-being or a feeling of good health is usually found as a result of exercise. The measure of this is subjective and, therefore, is not accepted by many as reliable data. It is possible that this sense of well-being is emotional in nature and, therefore, is the result of

an adjustment concerning the autonomic nervous system. If this is true, then exercise may prove to be important in man's adjustment to stress involving the autonomic system."

Dr. Edward F. Crippen of the Committee reports:

"I am repeatedly impressed in all age groups by the difference in work capacity or desire to work in individuals with the same physical defects. Thus, physical appraisal is too closely integrated with mental state to be separated.

"More and more as I see patients, I feel one family, 'Brown' clan, can expect more physical fitness at sixty-five than the 'Holcombs,' and if I know the family then I know whether Joe Brown is up to standard. I presume in certain areas the standards at sixty-five change, that must be in the countries or localities with extra long life expectancies.

"'Good for the age' is a crutch used by me and many. It reassures the patient and allows the physician an out should succumb in two weeks. Of course, it doesn't work at twenty, so we don't use it. We always should expect more, for it gives us hope as well as the patient. The answer is whether the added diet, drugs, exercise, et cetera, are worth the effort. Yet the returns may be minute, in comparison to the efforts to obtain them."

In discussing the problem before the panel, Dr. Walter S. McClellan of the University of North Carolina writes:

"All suggested measures of the functional response of older people fail because of the lack of soundly established norms. The functional performance of any test to evaluate function is influenced by so many factors, such as training, ability to co-operate, desire to co-operate or the development of fear and apprehension, that it is very difficult to give a fair and sound evaluation to the test. Again, one may find a considerable variation in the response of the individual under study in repeated tests. No statistical analysis will reveal the reasons for these variations any more than we can give a logical reason for the changes in the function of the joints of an arthritic patient on different days and under conditions of climate and weather. There are no good ways to measure the total functional response of older individuals.

"The variations in functional responses in patients with similar structural defects resides in the initiative of the individual. Everyone is familiar with the great difference in the performance of patients with hemiplegia who show essentially similar lesions. One patient may be confined to bed, another is found in a wheelchair, a third is walking with the aid of a crutch or cane. The main factor which accounts for these variations is the motivation of the patient, which may be called 'desire to get well.' All experts in the field of restoration therapy for these patients recognize the importance of this factor and can show patients who have progressed up the scale of improvement much faster than their structural

defects would seem to indicate was possible when their treatment started. This may be the teachability of the patient, or it may be the degree to which fear complexes can be eliminated by the patient. The physician, the family and friends of the patient can either add to these fear complexes or they may be of the greatest aid in removing these blocks from the patient's therapy pathway.

"Heredity undoubtedly plays a role in the physical status of older citizens. Barring intercurrent acute disease or accident, heredity likely determines, more than purely environmental factors, the length of our life. Our hereditary environment can be influenced by environmental factors toward the shortening of our life span or conversely with the observation of good health habits, it may be possible to lengthen the life span.

"Physical exercise can only contribute to a person's physical state at the time of examination if it has been a regular part of his life's habits, for many years.

"A regular plan of physical exercise properly followed through young adulthood and middle-age, I believe, will provide the older person with a better physical machine.

"Organ systems function more normally when posture is good; i.e., they are sometimes impeded by the mechanical inefficiency of poor posture.

"The motivation required to get people to exercise may be either a desire for perfection or a fear of disability. In older people, the calloused attitudes which largely act toward maintaining the status-quo will prevent the development of any general health exercise program.

"The one exercise which I consider the most beneficial is regular deep breathing. It raises shoulders and chest, improving our posture and our sense of well-being. It helps return the venous blood to the heart, it fills more of the lung alveoli with air and results in improved oxygenation of the blood. This exercise can be done in any place and at any time and so has a wide applicability for many people. It, therefore, has both psychologic and physiologic effects when practiced."

A program of exercises should accomplish two purposes, according to Dr. McCloy of the State University of Iowa:

"First, the development of strength and endurance, and second, the development of flexibility. As individuals become older, they tend to do much less in the line of physical activity and as a result they deteriorate muscularly and become considerably rigid. The individual soon finds his strength is inadequate for a regular, very active life. An illustration like the following analogy will bring this a little more clearly in focus. Suppose someone were to ask you (for example) during the cold weather of winter, to wear under your clothing, a jacket weighted with lead, let us say of thirty pounds. Your response to the individual would probably be that it would be silly to wear a pack of thirty pounds all day. You would probably be exhausted by noon. If, however, your muscular strength is just adequate to handle a man thirty pounds lighter than you are, but

still be at your present weight, you can see that you would be undermuscle thirty pounds instead of being overweight thirty pounds. This would seem to me to make it clear that an individual needs enough strength and muscular endurance to do his daily work easily without undue fatigue, so that normally he would come to the end of the day sleepy, but not tired. Where the individual lets himself undergo a process of muscular atrophy, he soon gets to this point where he is undermuscle for his weight. This would mean perhaps that the individual should get his exercise regularly, three times a week, which would keep him up to normal. This does not mean that he should be made into the physique of a professional weight lifter or anything like that. He should be normal for his weight.

"Indeed, the other matter is the item of flexibility. As an individual sits a great deal, the fascia surrounding and interpenetrating his muscles becomes shorter. These fascia can readily be stretched by certain types of exercise."

The exercises outlined by Dr. McCloy for the older age group begin when the patient is in bed. The purpose of this is as follows:

"One often wishes to exercise in the morning, it is convenient, he is undressed, and he does not need to go someplace to exercise later in the day or to exercise at night when he is tired before going to bed, when it might also awaken him too much. However, most people upon arising in the morning, feel extremely unwilling to exercise. What has happened is that during the night the blood has collected in the splanchnic area, hence there is less blood out in the general circulation. When the individual gets out of bed, gravity pulls some of this blood out of his brain and he has a temporary brain anemia, with a feeling of no energy.

"By doing the first few exercises in bed he gets the blood squeezed out of the splanchnic area into the general circulation and when he arises to do the other exercises, he feels fine.

"There is another possibility relative to exercise which would be particularly applicable to individuals who have made recovery from coronary occlusion and things like that. A team of German research workers, Hettinger and Muehler, have reported something that is quite remarkable. If an individual puts a tension on muscle that amounts to as much as two-thirds of the maximum that the muscle can lift and does this for six seconds a day, the muscle will increase in strength as much as five per cent per week up to its maximum. The theory behind it is that this effect is brought about by the phenomenon of anoxia brought by this sustained isometric contraction.

"For example, if you will raise your upper arm forward to a right angle and flex your forearms so that the two forearms are in line and place a fist within the other palm, by simply pressing the two hands together hard for six seconds, at the same time breathing normally, you keep the glottis open, you can see that you can put the pectoralis major group on a tension with very little extra trouble. I have seen exercises of this

kind prescribed by a leading cardiologist for an individual who had a coronary occlusion and was still in bed from that occlusion. Obviously, the coronary occlusion was not a very severe one. But the cardiologist checking on the blood pressure and pulse rate of the patient decided that the exercises were well within his powers and would be beneficial."

Dr. McCloy finds that:

"There is no one posture that is suitable for everyone. As the human race has evolved, different people have gone farther away from aboriginal ancestors than others. Numerous people have skeletons, particularly the spine, the head, the feet and the pelvis, that very much resemble the ape. Others, and these constitute the vast majority, might be termed the average human type. A few have gone still farther away from the anthropoid and exhibit what I have called an ultra-human type of posture. This is hard to determine without an x-ray. However, the method of achieving a good posture—good, functionally—is about the same for all. The benefits of such good posture have been made here by Goldthwaite, Brown and others. One of the things that most of them would need would be that since they have achieved the poor posture, (as many of them have) there would need to be a considerable amount of stretching and things of that kind, to get back to what might be a good posture."

From the radio script "The Sitting Man," the ideas of Dr. Laurence Morehouse are further elaborated in the following:

"Many persons can correct their posture appreciably by remembering one of two simple tricks. The first is to level the pelvis; the second is to raise the breast bone. Difficulty with the pelvis arises largely from the fact that we sit down so much. In a sitting position, the body adapts itself to the situation. The body ligaments in the front tend to shorten, while those in the back lengthen to accommodate the greater distance from hip to knee. The long periods of sitting accentuate this stretching. When the individual rises, the ligaments tend to remain long, thus permitting the pelvis to tip forward. The contents of the abdomen spill forward against the front wall, producing the business man's paunch. This potbellied effect can be seen even on people who are otherwise not overweight. In fact, some people who have it try to remove it by reducing when the only thing wrong with them is their posture.

"If you think of the pelvis as a bowl you can see how its contents fall forward when it is tipped toward the front. If you tip the pelvis back to its correct position, you balance the contents of the bowl properly, and they no longer fall forward. The paunch may disappear altogether if you are not overweight. It is actually possible to take two inches off the waist just by making this postural correction.

"At first it may be difficult to get the pelvis back where it belongs. At least it is hard to hold it there because it puts a strain on other muscles and ligaments which are involved. One good way to start is to give

special attention to it while you are walking. Every step helps, and soon it may become a habit. Dr. Morehouse suggests that whenever you have a little walking to do, make a posture walk out of it thus making every step a corrective exercise.

"The second point to remember in posture is to raise the chest slightly—elevate the breast bone and allow the head and shoulders to relax. Bringing the breast bone up half an inch or so is not especially difficult, and it results in a comfortable and easy posture. The shoulders automatically fall into the right position, so they can be forgotten. The neck can be relaxed so that you won't look and feel as stiff as a ramrod.

"These two minor adjustments—the level pelvis and the raised breast bone—not only improve the mechanics of walking and digestion and other bodily processes, but they immediately give the appearance of a more vital and vigorous person. People who have participated in these reconditioning programs have stated that standing erect in this way has really helped them to change their outlook on life and become more positive and optimistic.

"The sedentary person may have become so flabby in muscle strength that opening a jar is something of a feat and opening a difficult window may require a major effort. Perhaps if he has to hurry upstairs, he sees spots before his eyes. If he has to climb to the top of a football stadium, he has to stop a couple times on the way up to rest. Such difficulties are indications that muscles are not accustomed to being used very much and then even the reactions of the blood vessels have grown rusty from disuse. This does not refer, of course, to the symptoms of people with heart disease, but to those who are otherwise healthy but who have lost their stamina because they never make any demands upon it.

"When muscles are not used, they tend to waste away. As the individual notices a decrease in strength, he may respond by protecting himself even more and taking it even easier than before. He uses his body less and less and becomes more and more sedentary. Before long he reaches the point where he doesn't like any kind of physical effort, such as that involved in bowling or dancing or playing golf or even walking.

"The first thing the sedentary person can do is just to decide to be more active. A good way to begin is to start walking more. Instead of driving the car to the nearby grocery or drug store, take a walk—not just a stroll, but a reasonably brisk walk—remembering to hold the pelvis level and the breast bone up. This will not only begin to increase the general muscle tone, but will help blood circulation and other processes of the body.

"After a few weeks, add some further physical activity—bowling, dancing, golfing, or any of the lighter kinds of pleasant exercise. Any activity of this kind helps to reverse the process of deterioration. If you don't care for sports, or if it isn't convenient to engage in them, it is possible to keep in good condition by a regular program of calisthenics. For sedentary people these exercise programs may be as short as ten minutes each.

"Exercise of the neck will frequently prevent the headaches and burning sensations that is complained of in this area.

"Another problem of the sedentary worker is that of

relaxation. You might suppose that anyone sitting down is relaxing, but that is often far from the truth. The sedentary man may be feeling very tense. He may have walked no more than fifty feet during the day and yet find himself unable to relax and go to sleep when he climbs into bed. One technique for releasing this tension is simple but often very effective. As you are lying in bed, tense every muscle in the body and then let go as much as possible. Allow the tension to be released slowly, preferably by a count. When you have released as much as possible continue to count slowly a half a dozen times more, each time trying to relax even more completely.

"Some people are tense because they are breathing unnaturally. In natural breathing, the abdomen moves out as the breath is taken in. Some people develop a habit of chest breathing in which the abdomen moves in as they inhale. Sometimes this results in considerable tension and vague discomfort. Correction of his breathing habits sometimes gives tremendous relief.

"Week-end sports can be dangerous unless they are followed rather faithfully from week to week. If you are used to playing thirty-six holes of golf every week-end, you will stay in fair condition from Saturday to Saturday. But if you haven't played golf for several months it isn't a good idea to try for seventy-two holes on your first week-end on the course. This same thing applies to skiing and other active sports.

"Finally, here is word to the housewives. Housework is exercise, all right, but it isn't enough to keep your body trim. Even the best football player can't keep in condition just by playing the game. He has to exercise between games and he performs other conditioning exercises. The housewife should have some kind of outside exercise which is a little more interesting than scrubbing the floor or vacuuming the rug. Otherwise she becomes fatigued, not only from the housework but from boredom."

Taking just a little different slant on this exercise problem, Dr. Janet A. Wessel of Michigan State University said:

"I do not believe that special exercise prescriptions is the answer. I would rather see individual's activities for the day analyzed to see what can be done to improve his movement patterns through his daily activities. I believe that through such analysis we can make the individual aware of his movements, of how they influence his physical and mental condition. I would use special exercises only when one's movement patterns are limited through trauma, through disease or illness—mental or physical—which incapacitates the individual to such an extent that he needs special consideration.

"I believe that every patient treated in hospital or doctor's office over a period of time should be shown simple postural exercises for sitting, standing and walking. If the nurse is taught the need for keeping the patient in good postural alignment, why shouldn't the patient know what it is all about? These simple exercises for balancing the body in different activities can be

taught by nurse and/or physical therapist. Whenever feasible instruction in balance body positions can be part of the total treatment of the patient. And, the patient should be educated to the value of exercise and physical activity upon the recovery process and the prevention of deconditioning phenomena. If he understands the value of physical movement upon his recovery, maybe he will begin to realize its importance for maintenance of optimal physical condition in everyday life.

"I believe that movement . . . not just prescribed exercise . . . is what is important to life. No one exercise done at specific times in a specific place is the answer. But the examination and analysis of one's total life activities through a typical day and week should be made . . . it may be that changing a simple movement pattern . . . kind, amount, and the way it is done . . . may be sufficient to maintain one's physical potential. Maybe by walking a little more than usual, by developing a hobby that demands physical activity appropriate for the physical level of the individual is the answer. Only when one's work and play cannot maintain the physical potential of the individual would I suggest the 'flat on the back approach to physical fitness' . . . prescribed EXERCISE."

In order to elaborate more fully on Dr. McCloy's reference to the work of Hettinger and Muehler, we asked Dr. H. Montoye to summarize their article which appeared in *Arbeitsphysiologie* 15:111-116 (1953), entitled, "Muskelleistung und Muskeltraining". The summary follows:

"Seventy-one separate experiments performed on nine male subjects over a period of eighteen months provided data on how the development of strength in a muscle was related to the intensity and frequency of training activities. All training was in the form of static contraction held for a measured length of time against a spring scale, and most of the observations were made on the flexors and extensors of the forearm held horizontally at right angles to the upper arm. On Saturdays maximal strength was measured. The higher reading of two trials was recorded. Sunday was a day of rest. Mondays through Fridays were spent in training sessions in which the intensity of contraction, the amount of time held, and the number of practices per day were varied. The study revealed the following findings:

1. Muscle strength increases an average of 5 per cent per week when the training load is as little as one-third, or even less, of maximal strength.
2. Muscle strength increases more rapidly with increasing intensity of training load up to about two-thirds of maximal strength. Beyond this, increase in training load has no further effect.
3. One practice period per day in which the tension was held for six seconds resulted in as much increase in strength as longer periods (up to full exhaustion in 45 seconds) and more frequent practices (up to seven per day).

4. The cause of the increase in strength (training stimulus) they believe is neither the intensity of contraction nor the degree of exhaustion of a muscle fiber, but rather a condition in which the oxygen supply to a muscle fiber ceases to be enough for its needs. A further oxygen deficit is not a stronger or more effective stimulus. This, they postulate, is an "all or none" characteristic of the "training stimulus" or stimulus to hypertrophy. The observation that strength grows more rapidly as the training load increases from about one-third to two-thirds maximal strength is to them only an apparent contradiction. They believe that due to the internal arrangement of fibers within a muscle not all fibers are equally taxed, so that not until the training load is about two-thirds maximum are all fibers suffering some oxygen deficit.
5. From measurements of biceps diameters in maximal contraction they calculate a maximal contraction strength of 6.6 kg/cm₂ (about 95 pounds per square inch) of muscle cross section. They found that the calculated muscle cross section increased in accord with this factor as strength increased. Thus, they conclude that the effective training stimulus extends from somewhere below 2 kgs. to somewhere under 4 kgs. per square cm. of cross section.
6. They found a correlation of $+0.77 \pm 0.09$ between (a) maximal increase in strength due to training and (b) the speed of this improvement, when twenty different muscle groups were compared. Finger muscles increased maximally 33 per cent and showed an increase of 3.2 per cent per week. For hip flexors the corresponding figures were (a) 177 per cent and (b) 22.1 per cent.
7. When tension per square cm. of cross section is held constant, endurance (holding time) is unchanged with increase in total strength. This is attributed to improvement in capillarization paralleling hypertrophy.
8. The rate of increase in strength sometimes varied considerably in the same period when two comparable training periods, separated by a long rest period, were compared.
9. There is a ceiling on the development of strength in every muscle. This is usually accompanied by pain resulting from some injury within the muscle that stops further increase in effort.
10. They postulate that the maximal strength of any muscle in the body is probably about three times the tension demanded of it in everyday activities."

Dr. M. S. D. Michael of Santa Barbara College, University of California, quotes a number of authorities to indicate that physical activity has a beneficial effect on the autonomic nervous system in relation to the rest of the body.

"Richter reports that the wild rat has large adrenals compared with the domestic rat and that surgical

trauma along with ACTH has little influence upon the ascorbic acid content, indicating maximum stimulation. When the adrenals were removed, the wild rat died more easily than the domestic, as if the active animal were more dependent on the adrenals.

"Hoagland, in reporting on the 17-ketosteroids as a measure of adrenal response, points out that the higher skilled and less fatigued men have less adrenal activity. The production of the 17-ketosteroids declines with age in this study and also with fatigue during the afternoon. It seems that the more active and less fatigued have better adrenal functioning.

"Van Liere in 1954 was one of the first to find a direct relationship between physical training and the autonomic nervous system. He showed that exercised rats had increased propulsive motility of the small intestine compared to nonexercised rats. The possible explanation was a dominance of the parasympathetic system.

"Taylor reports that forced bed rest has been found to reduce the body to a dangerous state similar to starvation. It is possible, then, that we have a means of strengthening the adaptive mechanism of the body. Exercise might well be a pleasant means of increasing the survival potential in a mechanical, emotional age.

"Persky discusses the difference between physical activity and psychologic (emotional) stress in pointing out that blood eosinophil and glutathione levels are affected only by psychologic stress. Thus exercise can affect the adaptive mechanism without itself increasing the reaction caused by emotions. The advantage of exercise lies in the fact that it stimulates the defense mechanism, not that it is similar to other stresses.

"Exercise in itself is a form of stress and can cause fatigue along with breakdown if not done under controlled conditions. For this reason, the following precautions should be noted:

1. Exercise should be strenuous enough to stimulate, but not completely fatigue the body.
2. The exercise should be spaced so that rest periods follow the activity.
3. The exercise should be regulated to the individual's genetic makeup.
4. The exercise should involve the entire body, not specific areas only; i.e., endurance, strength, agility and flexibility.
5. The exercise should be altered to prevent boredom and maladjustment.
6. The exercise should be continuous throughout life, particularly in middle and old age, when society places greater demands upon the emotions.

Physical activity under these circumstances appears to serve a two-fold function:

1. During an emotional stress, exercise would tend to relieve the tensions built up by the body, preparing for action.
2. Repeated amounts of exercise might elicit the adaptive mechanism which keeps the internal environment in balance and thus improves the ability to adjust stress."

Dr. Leon W. McCraw of the University of Texas says:

"In my opinion the value of physical activity in preventing deterioration is conditioned both by the extent to which an individual has developed prior to maturity and by the degree to which he continues vigorous physical activity during adulthood. This latter is perhaps of more importance particularly in view of the fact that very few people continue to engage in physical activity after reaching maturity. This belief is substantiated somewhat by the research that suggests that there are no differences in longevity between so-called athletes and nonathletes, except where the athletes continue to engage in physical activity.

"To insure the attainment of maximum value from physical activity we must make rather drastic changes in our present day programs. First, we must include in the programs activities that will develop fitness. The sports, rhythms, and more sedentary games that we have for the most part today will not do so. Perhaps we must return to some of the more formalized activities. The football coach does not rely on playing the game alone to condition his squad. Second, we must give our students activities in which they can and will participate in later life in order to keep fit. By this I am not advocating such recreational activities as tennis, golf and bowling. These are good and should receive attention, but we must realize that we can never hope to provide sufficient facilities and equipment to insure regular participation by even one-fourth of our people in such activity. What we need are more activities in which people can engage at home and in the immediate neighborhood. Third, we must install in each individual a desire to maintain good physical condition. This is perhaps the key to our problem. I know many persons in my own profession who do not engage regularly in physical activity, even though they are fully aware of the value of so doing. They just do not have the desire to stay fit. How to develop this desire is something that our profession must solve if physical activity is to have maximum value, particularly in later life."

Dr. Ernst Jokl, now of the University of Kentucky, in an article written for the Springer Publishers of Heidelberg, Germany, entitled, "Alter und Leistung" (Age and Efficiency), stated:

"The first result of this research is that the lifelong physical exercise program which the subjects had followed: namely, apparatus, gymnastics, plus light games and some track and field training, not only developed high standards of physical efficiency, but also maintained them in middle and old age. The evidence proved that a well trained gymnast of seventy is likely to be superior in respect to almost all acquired motor activities to an untrained man of twenty.

"The gymnasts on whom this study was conducted comprised an age group which, according to morbidity and mortality statistics for the general population, would be expected to be affected more than the younger age

group by degenerative diseases of the cardiovascular system, by neoplastic growth, and by kidney ailments. The absence of the disabling sequelae of these conditions among the gymnasts is noteworthy. In addition to the favorable standards of efficiency and health, there was in evidence a remarkably high level of physique and strength.

"These findings raise the following question: Does the lifelong physical training exert a powerful influence that inhibits the aging process on a broad physiologic front, including the decline of physique, the decline of efficiency, and the decline of health? Jokl answers the question in the affirmative.

"Data reviewed would indicate that the rapid increase of longevity which is embraced in Europe and the United States during the past fifty years or so has been accompanied by a general lengthening of the period of optimal usefulness of men and women.

"The process of maintaining resources or even of unfolding new resources of physical strength after age forty, fifty, sixty or seventy is still going on; i.e., the period of fitness lengthens continually. Impressive performances are indicated which indicate the validity of this statement for feats of endurance and skill. Performance records from the German Gymnastic Festival for the Old in Cologne in 1928 were compared with the 1952 results for identical age groups in Marburg. In spite of the misery of the war, a categorical improvement in performance has taken place between 1928 and 1952 corresponding to a collective retardation of aging by an equivalent of six to ten years.

"The following figures indicate the magnitude of the problem under review for this country. Between 1944 and 1952, medical research and improved medical education and rehabilitation have reduced the death from all causes by 9.4 per cent. Five years have been added to the average life expectancy. As a result of these and other advances, the lives of 845,014 Americans have been saved in the last eight years. They earned an added \$1,488,000 to the national income and excise tax receipts. A corresponding and even greater material advancement can be achieved by prolonging the fitness of the aging population, enabling them to continue working and postponing the period of dependence upon family or public support. Indeed, a new, unexpected and fascinating task presents itself to the profession.

"We, therefore, have to continue the battle not only against illness, but also against premature inroads made by aging. That judiciously applied physical training can inhibit aging by many years and that the material welfare of the nation and the happiness of the people can thus be enhanced is shown by this research publication."

Dr. Jokl concludes another paper on the psychology of exercise by the following paragraph which is worthy of quotation:

"Decelerative influence of exercise upon the aging process would be inexplicable without consideration of psychological incentives. Great musicians who continue

performing in their seventh and eighth decades, like Toscanini, Bruno Walter and Moritz Rosenthal; the famous mountaineers who climbed the Tibetan peaks simply because they were there; the Marburg gymnasts who preserved their fitness well into the second half of life; they all were inspired by mental concepts, by human attachments, by social relationships and, at times, by spiritual convictions. Between the hammer of dynamic ideas and the anvil of a favorable environment, exercise forges and maintains their zest for life."

The thoughts of Leonard A. Larson, Chairman of the Department of Physical Education, Health and Recreation at the New York University School of Education, are summarized very well in the following quotation:

"I believe that one of the major needs that old people have is the absence of physical exercise. So many have the idea that normal movement during their working day is sufficient to meet their physical needs. Another misconception is that long periods of time are necessary in order to achieve a state of condition that will serve a person through the day without reaching a fatigue point early in the day. After doing some personal research and experimentation over the last two years, I am more convinced now than ever that the 'key' concept of maintaining good condition is the term **CONSISTENCY**, not duration or intensity, although movements must be intense in order to achieve and maintain good physical development. I believe that one of our major problems to solve is one of finding content of a fifteen minute to one-half-hour-period during the day for physical activity that will yield an overall conditioning of the body. If the exercises are beyond the normal requirements of the day, and continue every day, the human body will develop beyond the normal demand of the exercise, due to the accumulative effects of conditioning. I sincerely believe that, if we could find some way of encouraging persons to maintain a good exercise program, one's vitality and energy could be maintained for a longer period of time than is now the case. I am also convinced that the stresses and strains that man must go through in a hurried life are highly related to the physical organism in this state of condition. I have also been interested in the therapeutic effects of exercise and am becoming rather convinced of the high relationship that exists between exercise and the state of health of an individual.

"It seems to me that your Society would do well to devote the major part of your work to the problem of exercise at all ages. For example, there are some that believe that the Little League activities are dangerous to young children because of the physical demand. I do not believe that physical exercise during the youthful period is truly detrimental; in fact, hard exercise is desirable. However, we do need the facts and do need to have some experimental research programs to gain necessary information."

The following summary of the discussions on physical education and exercise represents a col-

laboration on the part of Dr. Janet A. Wessel and Dr. Frederick C. Swartz:

All opinion sampled testifies to the benefit of physical education and physical exercise in the preservation of health in the aging group. Moreover, it is definitely indicated that the so-called physical stigmata of aging might be postponed a number of years by the institution of planned physical education and exercise.

As worthy as these ideas may be, the sales resistance encountered is great when the plan takes fifteen to thirty minutes out of each day, or even this amount of time three days out of each week. Education as to the continual need of physical exercise for good health and the prevention of disease may reduce this resistance to a degree. Each teacher, each physical education major, each coach of the various sports, each dancing or swimming instructor, as well as the members of this auxiliary department to medicine and the medical doctors, must by precept and example attempt to further this education.

Patterns of exercise beginning in bed and continuing into the "up" position certainly have much to recommend them, if the patient will just do the exercises.

In an effort to eliminate the "set-aside" time period, another concept was suggested. The needed physical exercise or "movements" would be woven into the pattern of everyday living so that by minor modifications of routine activity the objectives of the physical exercise could be accomplished. This program, enforced by an appeal to grace, beauty, glamor, physical stamina, and the prevention of pain and physical tension, might be more productive than our previous efforts have been. These patterns of exercise incorporated within the scheme of daily activities set the design for efficient movement of all parts of the body, so that in sitting, standing, lying, walking, running, pushing, pulling, lifting, or carrying, a maximum of work is accomplished by a minimum of expenditure of effort.

Logically, it follows that if physical exercise possesses the potential of improving health and prolonging the life of the average man, might it not do a better job by studying in addition, our usual methods of locomotion, sitting and resting to the end that these might be done with better mechanical advantage and therefore less expenditure of energy?

This study indicates rather definitely that many of the so-called stigmata of aging are the result of poor care of the machine God gave us. This is really not, therefore, a problem of aging, but one of youth, and it is at this level or younger that the effort and emphasis must be laid.

Dr. Janet A. Wessel's words seem to fit here particularly well:

"Regardless of where your work takes place—the home, factory, office, classroom, athletic field, or drawing room,

"Regardless of whether your play takes place on the dance floor, bridge table, on water, land or in the air,

"Regardless of how or what form of rest you have spacing your activities—

"You are shaping or reshaping yourself every single second of your life. Your shape and the running order of your body are being molded on a twenty-four shift—not during ten minutes a day of specific exercise, or in a weekend of sports and dances, nor even in outdoor gardening activities or in daily housework, BUT IN ALL THESE ACTIVITIES AND MANY MORE."

In the section of nutrition of the article on "Preventive Geriatrics" in *THE JOURNAL OF THE MICHIGAN STATE MEDICAL SOCIETY* of May, 1954, Dr. Arthur H. Smith says:

"One cardinal fact stands out; namely, that the aged malnourished patient is reaping the harvest of his yesteryears. The results of poor nutrition are more often than not insidious in their operation, and so by time old age has arrived there may have been established functional and even structural lesions which are the consequence of poor dietary habits begun years ago."

Dr. Edward F. Crippen, a member of the Committee, adds here:

"I suppose there will be a day, we shall diet all our life. I wonder if it is worth it when we know that it doesn't make much difference in a head-on collision whether we had French-fried or boiled potatoes for supper, but in case we make it to age sixty-five, I think the old adage as applied to appearance is similar; i.e., 'what we look like up to age fifty depends upon what our parents looked like, but after fifty depends upon what we did before fifty.' A major problem in the nutrition of the aged has been introduced by the cryptic remark, 'many oldsters would eat properly if they would eat.'"

Dr. Charles Sellers, also a member of the Committee says:

"A high percentage of aged persons presents some primary nutritional disturbance that is so insidious in its development as to go unnoticed for a long time. Generally, it revolves around a high carbohydrate and low protein and vitamin intake. It results in a lessening of physical strength and, hence, activity, loss of ability to concentrate, and some behavioral problems.

"Both overnutrition and undernutrition occur in the aged and come about through long established, faulty dietary habits. These habits become rigid and difficult to overcome, because the psychologic pattern and sociologic implications are deeply rooted. An approach to optimum weight from either inanition or obesity with a well balanced diet containing adequate, but not excessive carbohydrate, protein and vitamin content, would be a step toward better health in the aged."

Dr. Hazen A. Price then broadened the discussion by saying:

"Whenever the nutritional status of people past fifty years of age is being discussed, it should be pointed

out that it has yet to be proved that the nutritional requirements for optimum health are much different in the older person than in the other age group. It should also be remembered that there is a great variation among older people in their apparent need for the usual basic elements. Some have adapted themselves over the years to an intake of the various essentials consistently below the optimum level, either through ignorance, for economic reasons, or simply because of the lessened demand through relative inactivity and yet they seem to remain in a reasonably good state of health.

"In general, it can be said that as life becomes more sedentary, decreasing thereby the rate of body metabolism, the total caloric need is appreciably lessened. With this decrease in energy requirement, the demand for carbohydrate and fat in the diet is thereby much less. Protein breakdown is also decreased, but to a lesser degree, for it has been shown that a larger percentage of protein is required in the older person to maintain a positive nitrogen balance than in the younger individual. Some investigators have shown that a state of nutritional health can be maintained on as little as 43 grams of protein daily, while others, who are in the majority, feel that 65 to 80 grams are necessary.

"When the total caloric intake is too low, the protein storehouse in the body may be seriously depleted in an effort to make up the deficit. It is essential, therefore, that the total number of calories be sufficiently large to protect against this breakdown and this is best done by carbohydrate and only a minimum amount of fat for palatability.

"Fatty foods, particularly the fried variety, are not well handled by the older person's gastrointestinal tract often times creating digestive disturbances with secondary ill effects. Then, those persons with a familial disturbance of lipid metabolism tend to develop coronary sclerosis, in particular, much more often than other persons. The role of dietary fat in the production of arteriosclerosis stands out as a significant factor, and the evidence of this is becoming more and more substantiated.

"Mineral requirements in the aged are likewise substantially the same as in the young adult. Frequently, the optimum amounts of the diet are not maintained because of the general low intake of milk and vegetables by the older person. The need for calcium should require no emphasis, when osteoporosis is so common later in life. Iron is seldom a major deficiency, provided there is no blood loss, for the iron storehouses are usually adequate to supply all the marrow needs.

"Vitamin deficiencies are not nearly so common as one might suppose and the need again is no greater than for the younger adult. Because of the tendency to assume carbohydrate more than other foods, a lack of the 'B' factors is most often observed. Wilder has shown that when vitamin B is lacking to a significant degree in the diet, patients become more forgetful, irritable, apathetic, confused and depressed. He found, too, that mental changes, mainly apathy and those of personality, resulted from prolonged protein deficiency. Brozek, in extensive control studies at the University of Minnesota, showed that B complex deficiencies gen-

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erated general weakness, incoordination and neuromuscular deterioration. He also found that prolonged dietary deficiencies are apt to affect man's willingness and capacity for work. Changes in personality make-up were sufficiently altered so that motivation, a crucial factor in all achievement, is readily affected.

"As in all types of medical practice, prevention of illness is usually easier than correction of the condition after it is fully developed. So, in nutritional disorders, the establishment of proper eating habits in the young adult will prevent most often the serious consequences of long continued undernutrition. Overweight plays a large part in the disabilities of older people and is a serious drawback in programs of rehabilitation. Patterns of eating which have been practiced for decades are not easily broken, and when attempts to change them are made, frustration may follow. In a recent study it was shown that with proper diet, great improvement occurred in attitudes, physical tolerance, behavior and cerebral acuity. All of this resulted in a far greater self-sufficiency in practically all of those studied, except, of course, those with irreversible psychiatric or insurmountable social problems."

Dr. C. Howard Ross, Committee member, says:

"The state of nutrition in the aged varies from very excellent to very wretched. The wretched state seems to enter when lonesomeness and worthlessness are experienced. It has been shown that old people, living alone, may easily drift into a 25 per cent deficient diet, without being particularly aware of the departure. One of the greatest problems of the family physician is to impress upon the newly-created widow or widower that there are nutritional factors to be faced. It is his responsibility to outline one or more physical programs, and nominate the diet regimen which would match the activities suggested."

The status of fact in the problem of nutrition is further emphasized by Dr. Lawrence Rarick from the University of Wisconsin when he states:

"Increase in body fat is a characteristic of aging. While the age-associated increase in fat may be associated with a decrease in hormonal output, the accumulation of fat is usually accompanied by a decline in the energy output. For example, Brozek at the University of Minnesota compared a group of physically active males with a group of physically inactive males drawn from a large population of healthy, middle-aged business and professional men, and found that, although the weights of the two groups did not differ materially, the estimated content of fat in the inactive group was substantially higher than in the active group. In many primitive cultures, where the demand for survival requires much in the way of physical activity, the problem of obesity is not so evident. Studies on the physical characteristics of the Yami Tribe living in a small island south of Formosa, isolated from the influence of mode in civilization, have shown that after twenty-five years of age increases in weight are negligible.

"From the data now available, it appears that the accumulation of body fat is more marked during the third and fourth decades of life. It has also been shown to be the period when the human normally assumes a life of relative physical inactivity. Furthermore, the process of aging brings on a notable change in the chemical composition of body fat. The soft fat of youth tends to be replaced by a higher proportion of 'hard' fat, with its higher proportion of saturated fatty acids which Keyes and others believe to be a prominent factor in bringing on the cardiac involvements of aging. Repeated observations on animals given an ample exercise throughout the life span have shown that the exercised animals possess relatively more muscle tissue and less body fat than do unexercised animals.

"The studies at Harvard University show that the problem of obesity begins early in life and is not so much a matter of excessive food intake as of under activity. The observations disclosed that the dietary habits of the overweight children were not materially different from the normal children, but the overweight children were extraordinarily inactive. This pattern of physical inactivity tends to persist and cannot be ignored as a possible factor in contributing early fat accumulation with concomitant symptoms of aging. As Mayer has pointed out, 'the combination of physical sluggishness, a high fat diet, and high caloric diet, and the highest cigarette consumption in the world, may well be the deadly combination which prevents half of thirty-five-year-old Americans from reaching 'three score and ten.'"

Dr. R. E. Austin, Committee member, writes:

"It would seem that any discussion of the maintenance of an adequate physical machine to insure comfort and longevity in our aging population must of necessity consider adequate nutritional intake, both in the formative years and in those of the so-called declining years. The intake of adequate quantities of essential foods must depend on the general interest of the individual in his environment and his being in pleasant surroundings with sufficient activity to stimulate an appetite.

"During childhood and most of our adult years, the problem of being able to ingest a balanced diet to assure good protein, vegetable, and vitamin intake does not present much difficulty; but, as our teeth become carious and absent, our ability to masticate meat, vegetables with fiber and vitamin content, and a variety of solid food decreases. This must result in decreased protein intake so necessary for normal anabolic processes in the body, and decreased opportunities for gainful employment which make an individual feel essential to society, further inhibit his desire and ability to ingest adequate quantities of food.

"What may we do that will prevent or delay the onset of nutritional deficiencies in our aging population? First, of course, comes maintaining busy hands and minds for our senior citizens, and making them feel useful and needed in society. Second, a program beginning in childhood and continuing throughout the remainder of our lives in preventing dental caries

and availing ourselves of good dental care (fluoride, adequate dental consultations, et cetera). Third, supplementation of diets of the older age groups with sufficient quantities of vitamins to insure adequate intake despite changes in eating habits. Fourth, inclusion in our diet of goodly amounts of proteins in the form of meat or meat substitutes especially designed for the increasing proportion of our elder citizens."

Dr. E. W. McHenry, Professor of Nutrition, University of Toronto, writes:

"My impression of nutritional conditions among older people in this area is that, generally, conditions are not good. They are particularly bad for older people living alone. They are better in the case of institutionalized persons. Senile persons in institutions have been studied and they can be divided into two groups: those who eat sparingly and the gluttons. The latter group overeat, especially bread. I think it is worth while to ensure that older people are nourished adequately. An improvement in health is difficult to prove. At least, it is possible to prevent digestive upsets with properly planned meals.

"The main factors influencing the nutritional state of older persons are:

1. The adherence to long standing food habits and even the return to the habits and the foods of childhood.
2. Economic circumstances, particularly with people living alone.
3. Poorly fitting dentures, or the lack of use of dentures.
4. In the case of older persons living alone, the lack of cooking facilities and the absence of incentive to prepare and eat meals.

"Various types of corrected measures can be used:

1. The provision of one hot meal a day in a center to which older people can come for the meal and companionship.
2. Good meal planning and good cooking in institutions for the elderly.
3. Educational efforts supplied by physicians and nurses. The best time to ensure adequate nutrition for elderly people is in childhood, when food habits are being formed.

"There has been a suggestion that an adequate intake of nicotinic acid will prevent the onset of senility. There is no evidence that the administration of the vitamin will ameliorate senility. This question needs further study.

"In my opinion, the mental attitude expressed ensures good nutrition; namely, willingness to try new foods (or experiences) and the absence of rigidity in outlook also helps to delay senility. An interest in new things is highly beneficial both in nutrition and generally."

Dr. L. B. Pett, Chief, Nutrition Division, Department of National Health and Welfare of Canada, contributes the following:

"It is frequently stated that many of the aches and pains, weaknesses, and difficulties associated with growing old could be avoided by better nutrition. Specific advice on how to do this is still difficult, since most of the evidence is inferred rather than established. A few things may be said:

1. A balanced diet throughout life appears to do more good than any kind of diet or dietary supplement begun in later years; so start early.
2. Nothing in excess. This aphorism of the Greek philosopher, Solon, needs to be followed throughout life. It applies to individual food constituents, such as fats or vitamins, as well as the foods themselves. It is a nutritional signpost on the road to health, but it needs to be balanced by an idea that was not stated by the Greeks; namely, keep up in your older years a little of everything that you have found to suit you.
3. Eating a variety of foods is certainly the "keynote" of good nutrition. Continuing to eat a variety of foods requires conscious effort in old age, when loss of teeth, economic stress, loss of appetite, gastric upsets, illnesses and various diseases, work to produce poor eating habits and ultimate malnutrition.
4. Keeping up physical activity, perhaps of a different kind, but still enough to flex muscles and improve the circulation, is just as important as the diet in avoiding some aspects of senescence. It will help muscle tone and stimulate appetite and interest in life, just as eating a variety of foods and keeping up some physical activities becomes increasingly difficult and requires continuous thought and effort.
5. Since the amount of food must be balanced against the amount of activity, and since illness and laziness tend to reduce the amount of activity in old age, it follows that the foods eaten must provide more and more essential nutrients and less and less volume and with fewer calories. To do this, the empty calories represented by sugar or fat must be decreased.
6. Some protein of good quality should be eaten at every meal. The best and cheapest of such protein comes in milk, cheese or eggs and meats like liver.
7. If the above advice is being followed, weight control will be achieved at all ages, food habits will avoid excesses, mental activity and outlook can be maintained at a suitable level and nutrition will be making a real contribution toward prevention or postponement of the diseases associated with the aging group."

Dr. Icie G. Macy, Consultant, Merrill Palmer School, opined that "optimal geriatric nutrition" was "today's challenge," and in support of this idea offered the following:

"The ultimate goal of the science of nutrition is to establish a standard of dietary intake that will provide for the highest obtainable level of health and well-being for every human being regardless of age, race, religion, political belief, or economic or social condition.

Optimal nutrition and an adequate diet are recognized as the prime factors in the propagation of individuals with the maximum potential for physical development and maintenance of physical and mental health throughout life.

"Our concepts of the composition and role of foods have changed with the rapid development of medicine and the science of nutrition. Recent times have been rich in discoveries which have led to the evaluation of different foods on the basis of their chemical and biologic properties. In addition to the 'proximate principles'—proteins, fats, carbohydrates, and minerals—today more than fifty nutrients obtained from food-stuffs are known to be present in the body and to be necessary for life and health in varying quantities ranging from macro to micro amounts. A recent publication quantitates milk—Nature's most nearly perfect food—in terms of more than 250 different constituents! We have reason to believe that other common foods will be found to contain a similar abundance of individual nutrients when they have been studied more completely. Physicians and scientific investigators in many fields respect more than ever before the role of dietary relationships and imbalances among the essential nutrients in the diet in relation to health.

"The demonstrated importance of nutrition to the health of population groups everywhere placed modern evaluations of food on a *cost per nutrient basis*. Although we still lack complete knowledge of the composition of common foods in use in the countries of the world, the United Nations' economic policies with regard to food supply are now being formulated not so much in terms of dollars and cents as in terms of the physiologic needs of man. World food supplies and nutritional 'targets' now are considered in terms of a balanced diet, with food, agriculture, and nutrition as basic factors in international relations.

"*Optimal health and optimal nutrition* encompass broad and more positive attributes, such as stamina, efficiency, reserve, and capacity. Indeed, the World Health Organization, with its primary object the highest possible level of health for all people, has stated in its constitution, "health is a state of complete physical, mental, and social well-being, and not merely absence of disease or infirmity." Advances in medicine and science, including nutrition, aided by a better flow of scientific information to the public, have already contributed to a longer span of life. Therefore, today's challenge is to make these later years abundant ones and to enable aged men and women to enjoy the fruits of their labors and at the same time maintain their independence, dignity, and a useful role in society.

"Research has demonstrated the chemical as well as the physical individuality of people at all ages; hence a new branch of science has come into being—chemical anthropology. Studies of life processes also have revealed the dynamic nature of the body. These studies show that nutrition is truly food in action and is *the chemistry of life*, as Professor Lafayette B. Mendel so aptly proposed more than three decades ago. Much research remains to be done, however, on the aging processes and their effect on the utilization of the diet

and metabolism, and on the dietary requirements of older people.

"As we grow older, we accumulate the results of accidents, infections, malnutrition, and other untoward conditions, and these scars of living may be carried over from one epoch of life to succeeding ones and thereby warp or dwarf the later years. Although these scars acquired in the adventure of life may not be obvious and disabling in themselves, they can weaken the structures and functions of the body to the extent that, when acute illness, accident, or shock occurs, prolonged disability and chronic illness may result. Every individual has a characteristic capacity to utilize and store chemical elements from ingested foodstuffs, a capacity determined by heredity, eating and elimination habits, and physical and mental states. A diet for an old person should therefore be based on a knowledge of his dietary history as well as other factors pertinent to establishing optimal geriatric nutrition. As Hippocrates (460-370 B.C.) recognized long ago, 'a slender and restricted diet is always dangerous in chronic disease and in acute disease where it is not requisite. And again, a diet brought to the extreme is always dangerous.'

"In the aged, long standing and persistent bad food habits are not easily changed, especially in those of low economic status and in the disinterested groups. Chronic misfeeding, which may date from birth, frequently results in the body's becoming 'conditioned' to a poor diet. The results are evidenced by poor nutritional status. There is no doubt that poor nutrition over extended periods of childhood produces an adult of inferior physique, less stamina, and the prospect of premature aging. Food must nourish the body under all types of conditions and circumstances.

"It is frequently assumed that the dietary patterns of old people, especially those living alone, are molded primarily by such factors as economics and the condition of the teeth. Evidence accumulated from several recent surveys, in this country and in England, of customary food habits of persons of sixty-five years or older, shows that these two factors are not necessarily the most important. These subjects were not restricted in their choice of food; 67 per cent were moderately active, with the remainder sedentary.

"The results show that more than half of the individuals did not consume enough yellow and leafy vegetables to provide the vitamin intake recommended by the Dietary Allowances of the Food and Nutrition Board of the National Research Council. Similarly, citrus fruits and other foods high in ascorbic acid were inadequate in 40 per cent of the diets. Forty-three per cent showed an intake of less than one pint of milk or its equivalent in cheese per day. There is good evidence that poor vision in the dark and eye strain in bright light may have some relation to the diet of the aged. Low consumption of milk and of vitamins A, C, and D can contribute to poor calcification and fragility of bones, and to slower healing of bones and delayed recuperation of nerves after shock, injury, or other traumatic experience. A person who has little physical reserve or stamina, owing to cumulative scars

from injury or disease and depletions during life, needs an individualized diet prescribed by a physician who knows the patient's dietary history and nutritive status, as well as the presence of any disease.

"In the surveys of old people, medical and social factors were more frequent than economic reasons for changes in eating habits with advancing age. Laxatives were taken routinely by 55 per cent, varying from three times a month to once or more daily. The laxative habit alone may reduce the body's ability to absorb and retain fat-soluble vitamins already in low supply. The consumption of starches and sweets was less than what one is frequently led to expect. For men and women the average caloric intake decreased with age, probably as a result of a tapering-off of activity. With deterioration of health there was a reduction in consumption of meat products and green vegetables.

"An adequate intake of a balanced diet is thus the first requisite for obtaining optimal geriatric nutrition. The body requires the proper proportion of foods that contain proteins of high quality and minerals for the upkeep of the body tissues and bones; foods that supply adequate amounts of each of the vitamins so essential for regulating and supplementing proteins and minerals in metabolism of all the tissues of the body; and food that supplies energy. Inasmuch as investigations of dietary habits of elderly people show a voluntary tendency to reduce their consumption of the first two classes of foods (proteins, minerals and vitamins) that are most essential for body preservation and restoration, it is important to place greater emphasis on the inclusion in the diet of more generous portions of milk, meat, green and leafy vegetables, and citrus fruits or other vitamin C-containing foods. Caloric intake must be made adequate for individuals with depressed appetites, and restricted for those who tend to become obese.

"Our knowledge of the physiologic processes of aging is incomplete. Life histories are difficult to obtain with a reasonable degree of certainty and accuracy. And our knowledge of essential nutrients in common use, and the extent to which the concentrations are influenced by modern practices in agriculture, food preservation, and service, is limited. These are only a few of the areas of inadequate information that prevent efficient and effective application of the knowledge we already possess. No effort should be spared in learning how to care for our ever-increasing numbers of older people so that they may continue to play an active and beneficial role in society and not become an added burden to younger generations."

The impression of C. G. King, Executive Director of the Nutrition Foundation, Inc. of New York, is as follows:

"Persons in the older age group show most of the dietary flaws characteristic of our general public, but in greater degree. Many are overweight, especially in view of their age, usually show a lesser development of muscularity and lessened scheduled physical activity. There is undoubtedly some undernutrition occasioned

in part by low economic levels, a general debility, less incentive to prepare and enjoy their meals, and often a degree of despondency or loneliness occasioned by their social environment. Malnutrition in the severe form is only an occasional problem, but there is a reasonable amount of nutritional anemia, constipation, and mild scurvy caused by low intake of fresh and carefully prepared fruits and vegetables. There is considerable doubt whether the incidence of osteoporosis presents a true malnutrition that might be related to low intake of calcium, protein, Vitamin 'D' or other specific nutrients and poor dental conditions.

"I believe the primary need for improving the nutritive conditions for older members of the public could be met by more careful education of the administrative officers in charge of institutions for the aged and also a program to reach individual homes in which older people reside. I do not think that the basic problem is often economic, although undoubtedly that aspect of the problem is sometimes serious.

"Convenience and socially favorable living conditions are important both psychologically and for the good morale that is important in meeting most of their problems, including nutrition. Most institutions, whether for the aged, or otherwise, develop a horrible degree of lethargy in the preparation and serving of foods. Of course, this situation prevails in other respects as well, but I think it may be worse in respect to food practices than in other areas of responsibility.

"Prevention of premature aging processes can be importantly effected by good nutrition practices beginning with gestation in infancy. For example, dental deficiencies apparently are established chiefly in the very early years, and it appears that the development of atherosclerosis, liver disease, diabetes, (possibly cancer) and other metabolic conditions that afflict old age severely, may be influenced by poor nutrition practices in early years.

"There is little doubt that maintenance of ideal body weight, prevention of dental cavities, and an early adoption of good nutrition practices would markedly defer the aging process. With respect to specific nutrition practices, it appears that a consistent intake of good quality protein foods, such as meat, fish, eggs and milk, fruits and vegetables, whole or enriched cereals, and a sufficient caloric intake to maintain the body weight near the ideal would represent type of nutrition practice that would afford substantial protection.

"An educational program beginning with the pre-school and school years could do much to offset the present nutritional malpractices that are prevalent. There is a good prospect that work recently initiated at Teachers College, Columbia University, and at Harvard School of Public Health can result in a major improvement in giving school children and their parents at least a basic understanding of important relationships between food practices and the development of a healthy physique on the part of the individual. A further great gain could result in improved education of the medical and allied health organizations. The Council of Nutrition of the AMA is increasing its

interest in this regard and the similar encouraging developments are underway at the American Dental Association and the American Public Health Association."

Dr. Jean Mayer of the Harvard University School of Public Health has three rules recommended to retard senescence.

1. Eat a varied diet to avoid any chance of nutritional deficiency.
2. Do not eat too much of it so as to maintain the same weight that you had at the age of twenty-five, and
3. Continue to exercise regularly no matter how busy a schedule you have.

From the Department of Physiological Chemistry, University of California, Dr. Wendell H. Griffith says:

"Physical and mental deterioration in senescence might be postponed or prevented in part by a plan of life, deliberate or arranged that maintains social contacts, physical activity and responsibility for the accomplishment of a job of some sort. Preoccupation with ill health must be avoided at all costs. Specifically, adults (everyone in fact) should learn the advantage of the proper eating regimen that keeps one nutritionally fit and reasonably free from the common ailments of the alimentary tract."

On the subject of dietary regimens, Dr. C. H. McCloy of the State University of Iowa, expressed himself as follows:

"The average individual knows something about an adequate diet, but it is often presented in too complicated a way. I believe that this subject should be so presented that the average layman would know what to do. As I have stated, many people build up large cholesterol values with no warning whatsoever. For example, a man who had apparently been in perfect health found, at the age of sixty-eight, that he had a blood cholesterol value of 365 milligrams; this is extremely high. He was not obese and, in fact, kept his weight at the normal level all of his life; yet, shortly after this finding, with no other suspicious signs, he had a coronary occlusion. Had he known several years before that he had this amount of cholesterol in the blood, he could have reduced it markedly by diet. In fact, this man has reduced it 36 milligrams within one month, and is still continuing to do so. It would seem to me that it would be well worth while to indicate that, if the cholesterol is unduly high, a nonfat diet or some other diet would be desirable. I realize that this is a controversial matter, but it would at least seem to be worth a try; the studies by Keyes would indicate that this may be a life-saving matter.

"It seems not to be known to most physicians that some of the nonsaturated vegetable oils, such as corn oil or soy bean oil added to the diet in appropriate amounts will greatly aid in reducing serum cholesterol.

This has been brought to my attention within the last month at the National Institute of Health in Bethesda, Maryland. Since then I have found a number of cardiologists who did not know this.

"Along lines of dietary regimens I should like to suggest that perhaps the American Medical Association should produce a relatively small and specific manual on nutrition which might be used by the average physician as a 'Nutrition Formulary.' I have been increasingly impressed as the years have gone on with the numerous statements in the popular and medical literature (statements written by physicians) urging the patient to 'see his family physician' when undertaking any diet, whether for reducing or for some other purpose. However, nutrition is one of the areas in which a large majority of physicians have shown a complete lack of training. I do not think we can expect most of these people to read a 700-page book on nutrition, but many would read the germane parts of a nutrition formulary when giving advice on diets to their patients. In view of the fact that knowledge in this field is being rather rapidly extended, I think that such a formulary should be revised every two or three years along the lines of geriatric practice, with the emphasis upon the low fat and high protein diet."

Summary

In the line of a summary and with re-emphasis on certain points already mentioned, Dr. Frederick Swartz, a member of the Committee, had the following to offer:

"What the physical man is or is to be depends on what he eats. How foodstuffs are ingested, digested, absorbed, transported and assimilated for purposes of growth, repair, storage and energy formation is known as nutrition. An adequate diet is one that provides carbohydrates, fats, proteins, vitamins, minerals and water in adequate amounts and proportions to fulfill the aims of good nutrition. In good nutrition the carbohydrates, fats, and proteins yield energy and provide growth. They also maintain the tissues subject to wear and tear, so that the body is kept at ideal weight and the energy reservoir is adequate for the usual demands. The vitamins, minerals and water are an essential part of the chemical mechanism for the utilization of energy and for the synthesis of various necessary metabolites, such as hormones and enzymes. The minerals, in addition to being an integral part of the structure of the body, play an important part in the acid-weight balance. As long as life lasts, the preservation of the physical body in as good a state as possible is one of the major challenges of the aging. This is the job of good nutrition and the reason nutrition is one of the important problems of aging.

"The material for consideration pays tribute to the classroom and the research laboratory. The real textbook, however, has been and will continue to be the members of the aging group and the judgments offered will be those of the gerontologists, not the nutritionists. The problem of the nutrition of the aging will be

considered in the setting in which it exists. The hereditary background, the lifelong habits, the work, the home and the community environment are all facets of the nutrition problem.

"What do we know about the state of nutrition of our aging population? What is the size of the undernourished group? The malnourished? The overnourished? Are the groups large enough or important enough to warrant our attention? If they are, and we find the solution, will not a larger problem evolve—that of improving the standards that we now consider good? In any case, the problem of nutrition in the aging occupies a vital place today and will do so as long as man has a physical body and an interest in longevity.

"Brewer and associates studied the hemoglobin, ascorbic acid, vitamin A, and carotene of the blood of a group of residents at two county institutions in the state of Michigan. They report, 'no mean age differences were apparent until after the age of ninety, at which time mean hemoglobin, vitamin A and, to a lesser extent, carotene values were lower. It was of interest that there are persons of all ages who appear able to maintain normal blood concentrations of these chemicals.'

"Yiengst and Shock found in a study of 126 men, aged forty to ninety, that the serum vitamin A and mean carotene levels show no demonstrable age change. Serum protein concentrations in one Michigan institution gave a mean value of 7.07 grams per hundred milliliter for men, and 7.13 grams for women. These values fall within the normal accepted range.

"Gillum, Morgan, Williams, Kirk and Chieffi indicate that blood concentrations of ascorbic acid, vitamin A, and carotene are similar for both young and old, and depend on the consumption of similar quantities of food supplying these nutrients. About 70 per cent of the Michigan group did not meet the standards of ascorbic acid nutrition, and about 25 per cent had less than 30 micrograms per hundred milliliters of vitamin A in the plasma, but as pointed out by Brewer and associates, less than 10 per cent of the residents studied could be considered to be in poor nutritional state, with respect to both vitamin A and ascorbic acid.

"The physiologic processes upon which life depends do not deteriorate with age. This was demonstrated by Shock in the resting state in his study of the regulation of the acid base equilibrium, fasting arterial blood sugar, absorption of vitamin A, eosinophil response to ACTH, and the patient's ability to retain nitrogen. In a major way, these functions are supported by good nutrition.

"Balance studies done by Bogdonoff, Shock and Nichols indicate that the degree of negativity or positivity of the calcium balance on the low and high calcium diets is of the same order in the young and in the old. Calcium equilibrium can be maintained in the aged on 850 milligrams of calcium daily. As a by-product of this work, data are presented to show that the aged male retains the ability to store nitrogen, phosphorus and potassium and thereby build protoplasm.

"In any discussion of the nutritional state of the aged, some thought must be given to the undernour-

ished, the malnourished and the overnourished. These terms override one another and the difference only becomes apparent when treatment is instituted. The undernourished include those oldsters who are not getting the required amount of carbohydrate, fats, proteins, minerals, vitamins and water in the optimum proportion to maintain the body at ideal weight and function. This situation is best represented by the victim of starvation, caused by one reason or another. The treatment corrects this state by the removal of the cause, if possible, and by the provision of adequate amounts of the six essential food groups listed above.

"The malnourished could really include all variations from the normal standard, more specifically, however, the food fadists, the misinformed and the dietary tyrant come into this group. Getting these people to change lifelong habits is more difficult than getting the undernourished to increase his diet. These dietary ideas are almost as sacred as religious opinions. The malnourished, as defined above, taxes the ingenuity of the nutritionist, contributes to the morbidity rate, and probably succumbs somewhat earlier than the normal because of the absence of some of the necessary elements of diet.

"In the field of the overweight, the data are more definite. Authorities agree that obesity increases the hazards of most of the diseases common to man, and there are certain diseases, such as cancer, found more frequently among the obese. Dr. Edward Bortz of the New Lankenau Hospital says: 'In our experience, cancer occurs three times as often in persons who are 25 per cent overweight as in persons who are normal or slightly underweight when the first sign of the tumor has been identified.'

"Overnutrition is largely typified by the overweight and obese group. Twenty-eight per cent of the United States population is overweight. There are many good reasons to show that obesity is not just due to the simple problems of excessive caloric intake as compared with output. Future research may reveal some mechanism of nutritional utilization which may be a factor in obesity. Work is being done on variations in fat content of overweight people which may sharpen the focus on the problems of obesity and its effect on longevity. The solution of the problem of obesity and its effect on longevity in the aged, like the solution of the problem of obesity in the young, depends on the reduction of the caloric intake and/or an elevation of the caloric output. This requires a wise selection of a low caloric diet with adequate vitamin supplements.

"Undernutrition, malnutrition, and overnutrition must be considered as chronic diseases as we find them in the older population. Most of these situations will have existed for many years. It is likely that the graver nutritional effects are not detected in the older group, as they have probably paid the price of their indiscretions before they could be included in the aged. There is not much evidence to indicate whether malnutrition, as defined above, influences longevity, statistically, one way or another. In the absence of fatal disease, undernutritional states in the aged usually respond well to an adequate diet.

"In general, these variations from good nutrition,

either questionably in undernutrition or very definitely in overnutrition, shorten man's life span. It therefore follows that good nutrition, in the light of the present day knowledge, and subject to such modifications as will be brought about by advancing our knowledge in the future, should contribute immeasurably to increase the longevity.

"What ideally constitutes an excellent nutrition can be mapped out readily enough, but success in this science often depends upon factors quite remote from the utilization of food. From birth to the grave, the marriage of food to man is beset with more qualifying and environmental forces than most any human relationship. The following is a partial list of the factors that influence the nutrition of man as he goes through life:

1. Infant feeding, whether breast or bottle.
2. Too little, too much, or too monotonous food habits in early childhood.
3. Clean plate clubs.
4. Food fads of the individual race or nation.
5. Diversified methods of preparing food.
6. Luscious pictures of food in current magazines.
7. Unending interest of the obese in anybody's reduction diet.
8. The capriciousness of appetite.
9. The willingness to buy anybody's vitamins.
10. Faulty mineral intake.
11. The social implications of mealtime.
12. Overeating associated with anxiety.
13. Overeating associated with gluttony.
14. Overweight and its consequences.
15. The effect of responsibilities at home and position on food intake and digestion.
16. Limitations or excesses afforded by budgets.
17. Vacant chairs around the dinner table.
18. The status of the endocrine system.
19. The presence or absence of chronic illness.
20. The effects of bed rest.
21. Happy, satisfactory employment.
22. Motivation for living.

"Those factors that tend to impair or enhance good nutrition are, by and large, beyond the field of training of the nutritionist. The nutritionist or physician who wishes to accomplish the end of good nutrition will have to broaden his field of activity. The other alternative, to attack these problems as an interdisciplinary one, would include all of the fields of human endeavor.

"In general, this survey of the nutritional problems of the aged can be distilled down to one concept. The nutritional problems of the aging are merely the nutritional problems of man. The nutritional status of the aged person, as observed in practice, is the result of all of the factors influencing nutrition that have been applicable during his lifetime.

"The nutritional derelicts found among the aged should be treated in the light of modern dietetics insofar as possible, irrespective of age. It is a common experience among physicians that the barrier of dietary habits and tyrannical ideas about food are almost impossible to overcome. Here is a field where most can be accomplished by those who can effect the wisest and

simplest compromise. We usually have to settle for less than an ideal arrangement, because more strenuous efforts at treatment cause the patient to break off his relationship with the physician, thus destroying any chance for improvement.

"The attention drawn to nutrition by discussion of the problems of aging brings to light anew and with emphasis, the fact that more attention must be paid to nutrition in the formative years, by a better understanding of all the facts which influence nutrition. By the employment of all the involved disciplines in a great team effort, we should be able to change the food habits of the growing young and bring to advanced years a man who will be more rugged physically with each advancing generation."

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The Changing Scene

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THE Changing Scene has touched many areas of our national life but none more so, it would seem, than our professional activities as they relate to our allied professions and all other areas of American enterprise. To some of these changing scenes I should like to direct attention.

During the last thirty or forty years medical research has come of size, it has grown to true stature, it is big business as a result of imaginative, challenging and loyal co-operative team play. As this is being dictated on the plastic ribbon I am gazing at a small black and white, framed picture of my little one-room laboratory at Boston University. In it I see a small kymograph, a tissue bath, a desk lamp to warm the fluid in the bath, and a few bottles of reagents and solutions of drugs on the shelf nearby. Below, I see a bucket to catch the washings. Gazing at this picture brings back hallowed memories, for in this same little room it was my privilege as student counselor to confer with medical students and staff members alike. As I gaze now toward the other wall I see a large framed document with the gold typed title, "American Pharmaceutical Manufacturers' Association—Code of Ethics," and scintillating as after images I see now through closed eyes the many wonderfully equipped research laboratories of our industry, in our country and the world over, along with all those other excellently equipped and utilized research laboratories in our medical schools and hospitals and research institutes. The scene has changed for all of us in terms of the simple, smoked kymograph and its equivalent, to the electrocardiograph, electroencephalograph, spectrograph, spectroscope, infrared spectrophotometer, Geiger counter, cyclotron and their respective equivalents according to one's special field of interest and research endeavors. Research is big business. Medical research is big business and has achieved this stature because of very intimate and loyal co-operative team play. And during this changing of the scene, you and I in our respective fields of

interest have been most privileged to have taken a small active part therein.

In this connection I read with real pleasure in my weekly anticipated copy of the *Detroit Medical News*, the editorial by Dr. F. P. Rhoades entitled "Partners in Research." I quote him directly:

"The highly trained technical personnel for research comes from many fields; the chemist, the physicist, the bio-chemist, (and may I also humbly include the pharmacologist), the physiologist, the bacteriologist, the pharmacist, the veterinarian, and the clinician. Each is obligated to make his contribution before a new therapeutic agent can be released for general use.

"This team work must, of necessity, include the practicing physician. He plays an important part be he internist, surgeon, pediatrician, obstetrician, or generalist. His careful clinical evaluation of the new agent discloses any untoward effects. These should be reported in writing. Clinical trials also discover additional and unsuspected uses for the new agent. It should be obvious that the product of the original research should be used to the exclusion of substitutes which, rest assured, will spring up as soon as the value of the new agent becomes apparent.

"While the majority of practicing physicians cannot find the time to conduct carefully controlled clinical tests, they can contribute to research by making new funds available through prescribing the products of research. They should not yield to the temptation to use 'something just as good' in the mistaken belief that they are doing their patients a service.

"The research houses" says Dr. Rhoades, "are constantly striving to bring forth ever-increasingly effective therapeutic agents for the alleviation of the multitudinous ills of mankind. We, the practicing physicians, owe them all the support within our power. Let us be part of the research team through the use of new-found therapeutic agents which bear the authoritative stamp of ethical investigators of the research pharmaceutical firms."

How could one have said it better?

The scene has changed in reference to medical publicity or medical writing as evidenced by this occasion when you are honoring members of the press, members of the radio and television media of distribution. This is as it should be. An educated citizen is the strength of our country. Many of you will recall the first and foremost of popular medical writers, a citizen of our state

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and an honorary member of our Michigan State Medical Society and of my local Ottawa County Society, a man whom I am most pleased to consider as one of my best friends, Paul DeKruif. You will recall his *Microbe Hunters*, which to me is still his best work and which I know was one of the main influences in directing many a soul into scientific and medical research and practice. What a joy it must be for Dr. DeKruif to reread on occasion his hundreds of letters telling him just that, "Because of your *Microbe Hunters* I am a physician today." Paul was a pioneer and a lonely one at that, even well beyond the appearance of his *Men Against Death*, which I believe to be his second best. If only these two works were his sole contributions to this important field of medical writing, his prodigious efforts to the present moment notwithstanding, they would suffice to endow him appropriately with the title, "The Forerunner" or "The Pioneer" in this very important field. In our American system of free enterprise we need you medical writers as a "good press," as you need us to press you.

Medical writing in scientific journals has experienced a changing scene but, unfortunately and all too frequently, from a pleasant readable style to that of most straight-laced, corseted and confined routine telegraphic format. Would that our editors would permit even a smattering or smithering of the English style. Frankly, my first choices of medical reading are the British journals. In their writings the author's personality is not always subdued, his style is revealing and personalized, thus captivating the reader's attention while he pleasantly encounters a solid pearl or two.

In this very important educational medium, we need a change of scenery, back to the delightful, personalized style, certainly for those authors who really have something to say.

The changing scene has affected medical education. The old *Materia-Medica* has sublimed into more specific therapy. The old course in pathology has become functional. The diseased patient is now considered as one with aberrant or disturbed physiologic mechanisms. He has been altered biochemically. Anatomy is now being taught as a functional discipline with pathologic and surgical implications. The enthusiastic conscientious internist now frequently returns (or even retreats!) to the laboratory to search further

into those fundamental concepts to which he was originally exposed during his early years of medical training but which at that time did not appear to be of sufficient importance to demand wholehearted attention; only now do these concepts and principles become of great significance in reference to a specific medical or surgical problem. New facts added to old facts pile up to mountains of information which at times seem to be insurmountable, but if facts, important as they are, could be minimized and more fancy be permitted, that is, cogitation, imagination and good old solid thinking which obviously implies that adequate time must be allotted for it, would our future physicians be even better equipped to handle diagnostic problems as they present themselves in general practice? Several medical faculties have initiated and others are now exploring the so-called vertical system of education rather than the horizontal approach, that is, an organ such as the kidney for example is studied successively from the point of view of anatomy, physiology, pathology and therapy; in other words, in logical sequence from a structural, functional, pathologic and treatment point of view, following which another organ or system such as the lung or respiratory system is sequentially studied in a similar manner. This is being done in a laudable attempt to have one see the forest as well as the trees. These educational experiments will indeed be interesting to examine during the next several years.

The scene has shifted in terms of the medical apprenticeship; whereas formerly the country doctor was the devoted medical faculty in the old horse-drawn buggy between calls, his place has been very properly assigned chiefly to full time teachers who make a career of their various specialties. But is there still room for some sort of modified apprenticeship? How much does the average medical graduate know about setting up medical housekeeping from a business or economic point of view? What does he know about the very many unanticipated duties and responsibilities associated with general practice, be they social, economic, religious or otherwise in nature? Could even one month reasonably be spared from, or added to, the present medical curriculum to permit the future graduate to live in, or work with, some busy practitioner in a sort of father-son relationship if for no other reason than to pick up a few pearls of wisdom he never could learn in

the classroom, the laboratory, or the hospital bedside? Should some form of apprenticeship return to the medical scene? In our present position of being so closely scrutinized by the general public, would that very important personal element change the current and all too often undesirable connotation of the M.D. to that of the true physician with all that this term implies?

The scene has shifted and will shift more emphatically no doubt in the closely allied profession of pharmacy. Years ago the professional pharmacist was heavily occupied with the compounding of complex prescriptions, certain ingredients of which might have had some definite beneficial effects, others of which perhaps had little if any therapeutic value. Today the average drug store, (please note that I did not say the average pharmacy), is so cluttered up with beachballs, chewing gum, hair tonics and garden hoses in many instances, that one is almost defied to find the most important unit in the store, the prescription counter. Why must one wade through a maze of nonprofessional five-and-dime type of material to obtain a prescription? The alert pharmacist will soon place his prescription counter in full view either from the sidewalk or immediately upon entrance to his store. This is his lifeblood as it is also that of his customer. Why not make it the most important unit in his shop in order to justify the name of pharmacy? Many pharmacists will tell you that in order to break even or to make a small profit they must carry all these extra gadgets and appliances, but this is highly doubted. Statistics definitely support that pharmacist who has sworn off selling lawn mowers, soup strainers, beachballs and straw hats in favor of ethical pharmaceutical prescription items and the trend today is definitely in the latter direction.* This scene is changing favorably. At several recent meetings of our Board of Trustees of the Columbia University College of Pharmacy, this has been a topic of major interest. It is reasonable to anticipate, I believe, on the basis of these and other discussions, that the future pharmacist may be trained along new lines, and this is where we as physicians might definitely enhance this picture. We have confidence in our better trained pharmacist and we should encourage and support the most professional atmosphere and curricular disciplines possible in this closely allied important profession.

In this respect the professional pharmacists have

been duly recognized en masse by the physicians in this area in the form of an auxilliary group known as The Pharmaceutical Associates of the Wayne County Medical Society. This pioneering effort undoubtedly will be duplicated across the country during the next decade or two. This is truly a favorable change in scenes.

We have come to the last act, in fact we are changing to almost the last scene, that of the newer media for distribution of medical information, namely, radio and television. Last year you honored the latter medium, namely television, by inviting Mr. Leland I. Doan, President of the Dow Chemical Company, to discuss with you the topic: "And Then Came Medic." Most of us have seen "Medic" on one occasion or another and no doubt with mixed feelings of genuine pleasure, surprise, or great or mild satisfaction; seldom if ever have I heard frank condemnation, but such has been reported. The same no doubt can be said of "Medical Horizons," which has been sponsored for the last year and a half by the pharmaceutical company which I represent. Believe me, when I say that such services as rendered by Smith, Kline and French in their program, "The March of Medicine," by Dow Chemical Company's having supported "Medic," by Ciba's sponsoring "Medical Horizons," and by the several other companies which sponsor closed circuit television geared primarily to the physicians assembled in various auditoriums across the country, have come into being only after a great deal of soul-searching and deliberation. Each group, I am sure, has this main theme in mind: we will do this because it will be of more value than harm to the greater number of people viewing our presentation. In our own case, and I am sure it is true of others, we say "The primary purpose of 'Medical Horizons' is to promote better understanding of the doctor as an individual and as a member of the complex team (including allied professions and industry) that protects the nation's health."

Mr. T. F. Davies Haines, our president, amplified this in last Monday night's final telecast in this current series as follows:

"It's teamwork that makes medical progress, many heads, many hands working together. The physician, the surgeon, your family doctor, has with him, the

*"The General Report of the Pharmaceutical Survey 1946-49" conducted by the American Council on Education (page 93).

pathologist, the radiologist, the laboratory technician. Together, these men of science form what we might call a medical army whose dedicated efforts are conquering diseases one after another.

"Ciba hopes that, through 'Medical Horizons' you have gained even greater confidence in your doctor. For today, armed with new techniques, new medical knowledge, new drugs, your doctor can cure diseases considered fatal just twenty years ago. And new medical horizons are opening each day. Progress is encouraging. The future of medicine looks bright. We in the pharmaceutical industry are proud to have a part in this progress being made toward better health."

There is little doubt in my mind that television will be utilized more in the future, for the old physiologic dictum still holds true that "the eye perceives fourteen times faster than the ear." In applying this physiologic principle, obviously our individual and collective responsibilities are great in the selection of the appropriate material to be telecast either for professional, lay or mixed audiences. It is one thing to alert and inform a viewing audience but certainly this must be done with great circumspection. Mr. John Public wants to know, and if he does not find his answer in published media, whether they be the daily newspapers, weekly or monthly periodicals, he will seek it on the radio or via television. This happy circumstance offers all of us a great challenge in terms of mass education of the proper type. Yes, the scene has shifted to include television with the microscope.

And now for our last scene. One of the most significant changes in scenery is associated with recent developments in the field of mental health. As you well know, fifty-one out of every one hundred beds in our hospitals in this country are occupied by patients with some degree of mental illness, minor or major in nature. This

situation presents the greatest challenge ever offered to any professional group with all due respect to those fine Nobel prize winning medical achievements of the past; the latter's great, respective values come into proper focus, however, as one honestly visualizes today's medical Public Enemy No. 1, namely, mental illness. For what profiteth it a man if he should gain a whole and well body but be governed by an ill mind? On the other hand, in direct contrast—what marvelous accomplishments man is capable of when one thinks of Milton (or Helen Keller) for example—keenly endowed with all mental faculties despite the curse of blindness, an imperfect body. What is this world coming to when increasing numbers are diagnosed as psychotics or neurotics of one type or another? How important it is to attack this problem from many points of view, sociologic, spiritual and not the least, medical, and here we have at least some rays of hope in the clinical reports of the last two years concerning the new phrenotropic drugs. Let us hope sincerely that in due course the line of march to the mental hospital may be slowed down while the line from that hospital is accelerated. The challenge is great in the shifting of this scene!

I sincerely hope that my brief words, despite the changing scenes which inevitably lie ahead, may help to solidify and strengthen the professional bonds that bind us with only one thought in mind, to maintain and advance still further the best standards and practice of medicine with the assistance of the best therapeutic agents developed in the research laboratories of our great private, state and industrial institutions, as permitted by the finest system of free enterprise ever designed, the American Way of Life.

ELEVENTH GENERAL ASSEMBLY, WORLD MEDICAL ASSOCIATION

One of the tangible privileges of membership in the U. S. Committee of the World Medical Association is the opportunity to attend its annual assemblies as an official observer for the Committee. With the forthcoming 11th General Assembly to be held in Istanbul, Turkey—the world's "oldest and newest city"—mem-

bers are confronted with a tempting opportunity to visit all the world famous centers of medical lore and historical interest between the Atlantic and the Bosphorus. The dates of the Assembly are September 29 to October 5, 1957. The pre-registration fee of \$15 includes attendance at the annual dinner and an excursion.

Chronic Disease—A Challenge to the Medical Profession

By Otis L. Anderson, M.D.
Washington, D. C.

CHRONIC disease has been described as "one of the last frontiers of medicine." Since the power is not given us to see into the future, I cannot speak for the "last." Certainly, it is a most important medical frontier of today—and will be, for some time to come. The acute illnesses have given way to chronic illness and disability as the major health problem of the nation in this mid-20th century. That the medical profession of Michigan clearly recognizes this transition is demonstrated by the prominence of the subject on the program of your ninety-first annual meeting.

The questions which we as physicians must answer are "What more can we do about this major health problem?" "What *are we going to do?*" This is our challenge!

The Problem

First, I think, we must face the problem in its full magnitude. It is one of staggering proportions. In 1950, an estimated 28 million Americans suffered from disabling and nondisabling chronic disease or impairment. 5.3 million of these people—almost twice the population of the metropolitan area of Detroit—required a prolonged or continuous period of care: at least thirty days in a general hospital or more than three months in another institution or at home.

These are sobering statistics. To the physicians of Michigan this means that well over a million (1,176,000) persons in your state have a chronic disease or other impairment, and that long-term care is required for approximately one-quarter million. These statistics also point out the need for emphasizing the preventive aspects of chronic disease if we are to reduce—or even stabilize—this burden for the future.

It has been estimated that chronic disease results in one-half to three-fourths of a billion man-

days lost from production each year. Chronic disease accounts for public expenditures of \$1.5 billion a year for medical and hospital services, and for an equal amount each year for payment of cash benefits. To the individual, the cost of chronic illness is an even greater catastrophe. In 1952, some half-million families spent between 50 and 100 per cent of the total family income on medical care, of which the largest part was due to chronic disease. Another half-million families were burdened with medical expenses *exceeding* their income.

These figures will continue an upward trend unless we as physicians accept personal responsibility in pushing back the frontier of chronic disease.

Relationship of Chronic Disease to Aging

Since more people are living to the ages at which the chronic diseases occur most frequently, it is natural to associate chronic illness with the aging process. However, we must not be misled into thinking of chronic disease as an exclusive problem of old age. Over one-half of the chronically ill are under age forty-five; more than three-fourths of them are between fifteen and sixty-four. In the ages over ten, more than 60 per cent of the days of disability are due to chronic disease. This proportion rises with increasing age, of course.

During the past fifty years, we have made great advances in the reduction of mortality in the early age groups; but mortality rates among persons forty-five years of age and over, particularly among males, have been reduced relatively little. It is in this group that the greatest waste of human life occurs today . . . waste in years of life lost through premature death . . . waste in years of production through premature disability.

Currently, well over 25 per cent of the entire population has reached or passed forty-five years of age. As the numbers of our aged population continue to grow, the impact of the chronic

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Dr. Anderson is Assistant Surgeon General, United States Public Health Service.

diseases becomes ever more significant—medically, economically, and sociologically.

A New Attitude Toward Chronic Disease

The size of the task might prove overwhelming rather than challenging if it were not now possible to look upon chronic disease with a spirit of reasonable optimism. The defeatist attitude which has prevailed in the past has no place in modern medicine. Physicians who accept their chronic disease patients with resignation and lack of interest, regarding them as nuisances "for whom nothing can be done anyway" are oriented to medical practice of several decades ago. There is continuously being developed new knowledge which makes it possible to render effective relief—if not to provide a cure—for a host of chronic conditions.

Homburger² supports the realism of this positive, constructive attitude in his striking illustrations of progress made in recent years toward mitigating the effects of chronic disease. Among others, he cites such things as new knowledge concerning the rehabilitation of hemiplegics, means for alleviating the distress of advanced cancer, dietary measures for overcoming the poor nutritional status of many aged and chronically ill patients, and modern methods of treating arthritis and osteoporosis.

Unfortunately, many practitioners who encounter these problems daily do not apply or are not in a position to utilize this new scientific knowledge at the bedside, in the office, or the clinic. Although some time-lag between scientific discoveries and their full application is to be expected, we cannot afford to widen this gap by medical apathy.

A Sound Approach to the Chronic Disease Problem

In man's fight against disease, prevention has always been his most desired goal. The progress we have made with respect to acute illnesses is due largely to the tremendous strides made during the past half century in improved surgical procedures, medical techniques, and preventive health practices of both a clinical and public health nature. The knowledge and experience we have already acquired holds rich promise for the reduction of premature disability and premature death from the chronic diseases.

It is my firm belief that the chronic disease

challenge can best be met through prevention—in its broadest sense. To the extent possible, by preventing the *occurrence* of disease; beyond that, by preventing the *progression* of disease and of associated disability.

Positive Action Against Chronic Disease

There have been proposed at least four distinct lines of preventive action, which I, in turn, should like to suggest to you:

We can prevent the inception of certain diseases.

We can prevent the progress of certain diseases by early detection and early therapy.

We can prevent or delay the onset of premature death or premature disability due to known or existing disease through timely diagnosis, treatment, and rehabilitation.

We can join the effort to prevent the destructive social and economic effects of chronic disease on the patient, on his family, and on the community.

You will agree, I think, that the practicing physician has a real responsibility and a golden opportunity in each area. Reparative medicine alone is far from adequate.

We now know that through judicious use of oxygen therapy for premature infants, retrolental fibroplasia can be prevented and that use of mydriatics is to be avoided in the eye examinations of older persons for glaucoma.

The incidence of rheumatic fever can be reduced by instituting early and vigorous penicillin therapy in streptococcic throat infections.

Some neoplasms can be prevented by proper treatment of precancerous conditions or lesions. Others can be prevented by making patients more aware of cancer-inducing agents which might be modified or removed. For example, they should know that excessive exposure to sunlight should be avoided and that industrial exposures to such substances as tar, pitch, creosote, arsenic, radioactive substances, soot, et cetera, should be reduced insofar as possible in order to prevent skin cancers. Likewise, that proper control measures for reduction of air contaminants are significant in the prevention of lung cancer.

Many home accidents—which frequently involve long-term or permanent disability—could be reduced, if physicians, among other professional persons, when visiting patients at home observed and called the family's attention to hazards there which could lead to accidents.

Early detection and early therapy depend upon

development of "a high index of suspicion" for discovery of hidden cases of disease among presumably well patients. All practicing physicians perform varying types of diagnostic procedures. Many are narrow—confined to a given specialty—and do not provide for the discovery of other physical and mental deviations. There are over 200,000 practicing physicians in the United States. Until a majority of them emphasize diagnostic procedures on a broader base of screening—to detect abnormal conditions both among patients who present themselves because of illness and among those who appear for routine or other examinations—little real progress will be made toward prevention and control of chronic disease.

There is available at least one simple blood sugar screening test for diabetes that can be performed in any physician's office in less than five minutes. Relatives of diabetic patients, overweight patients and parents of babies of large birth weight, *in particular*, should be checked periodically for diabetes.

The aspiration method of making a vaginal smear is quick and simple. It is an invaluable tool in the early diagnosis of unsuspected cancer.

Kurlander³ has listed a number of tests and procedures which yield a high return in the discovery of unsuspected disease—simple procedures which can be performed every day in the physician's office or by using diagnostic facilities generally available within the community. If we care to indulge in the popular pastime of the season, we might conduct a poll of this audience to see how many of these tests each of you perform routinely in your practice. The Kurlander list includes:

1. Chest x-ray examinations for tuberculosis, cancer, and heart disease
2. Annual cervical cytologic examination on all women twenty years of age and over
3. Breast examinations of all female patients
4. Blood tests for syphilis and diabetes
5. Intraocular pressure examination of all persons forty-five years of age and over for the detection of glaucoma
6. Anorectal examinations—particularly on male patients
7. Urine testing for sugar and albumin
8. EKG tests for men and women forty-five years of age and over
9. Hearing tests to detect incipient deafness
10. Blood pressure testing
11. Oral examinations to detect dental defects which would have a deleterious effect on health.

As you see, although there is still much we do not know about specific etiology of chronic disease prevention, there is much we do know. Our work is only partially done—our obligation to society only partially fulfilled—if all present knowledge regarding the detection and diagnosis of disease is not fully used.

Equally important is the prevention of *complications* of disease—through modern treatment and rehabilitation. The physician who practices surgery must be aware of the postoperative complications that may follow particular surgical procedures and use every means to prevent them. The orthopedist and rheumatologist must know how to prevent deformities; the cardiologist, how to offset the recurrence of rheumatic fever, and so on through the many specialized fields.

As a cause of death in diabetics, acute infection ranks high. Here, the keystone of prevention, of course, is adequate control of the disease, proper nutrition, and meticulous cleanliness.

We now know that osteoporosis is a disease to be expected in the aged and chronically ill. Through maintenance of a reasonable degree of physical activity, proper dietary measures, and androgen or estrogen therapy, control of this disease can be facilitated. Too often, its existence is completely ignored or merely accepted as being inevitable.

In the not-too-distant past, it was generally thought that a patient with hemiplegia—particularly an aged person—was doomed to spend the rest of his life-span in bed, perhaps in complete immobility. Modern methods of management and rehabilitation have opened the door to restoration of self-sufficiency and sometimes a reasonably normal family and social life for many hemiplegic patients. Yet neither the medical profession nor the lay public seems to be entirely cognizant of how much disability can be prevented by prompt and appropriate treatment. Looking to the ultimate plan of placing the patient in his home environment, full understanding and co-operation of the family is essential. In varying degree, depending upon the extent of disability, it is now possible through several months of intensive rehabilitation to: (1) Prevent deformities or to treat them as they occur; (2) retrain the patient for ambulation and daily activities; (3) develop substitution skills in the unaffected extremities; (4) treat and rehabilitate the affected arm and

hand; and (5) treat loss of speech when this is present.

Even those conditions which at one time seemed most hopeless are now responding to patient, intelligent, and imaginative rehabilitation efforts.

Many Resources Needed for Prevention and Control of Chronic Disease

In the field of chronic disease, the division between preventive, curative, and restorative services is less sharply defined than in the area of the communicable diseases. The doctor-patient relationship is not as simple as in the treatment of an acute illness. Indeed, the whole situation is more complex. Frequently, it is complicated by serious financial, social, economic and psychologic implications—not only for the patient, but also for his family, and often for the community as well. The problems are too numerous and involved to be handled by the physician alone.

The significance of this fact—particularly among the aging—was referred to by the outgoing president of the American Medical Association in his address to the House of Delegates in June, 1956. Dr. Hess¹ suggested that a committee representing the medical profession might be used as a nucleus to join with other agencies (both medical and nonmedical) for a complete socio-economic and medical approach to the problem.

First, and possibly most important, among those from whom the physician must have the highest possible degree of co-operation is the patient. The physician may prescribe thoroughly effective drugs, diet, rest, or exercise—but the patient must carry out the prescribed treatment. An entire battery of diagnostic tests may be a routine part of every examination a physician performs, but if the patient visits his physician only when he is ill, and fails to present himself periodically for a general physical examination to determine the status of his health, little benefit will be derived from these good case-finding techniques. It is part of the physician's responsibility to urge his patients—particularly those in the age groups most susceptible to chronic illness—to have periodic examinations as a means of preventing or arresting the development of disease and disability. The attitude of his patients and the extent of their co-operation depend largely on their

general understanding of the nature of disease, its probable effects, and the importance of following their physician's advice. Their behavior is strongly influenced by the confidence they feel in their physician—that he will help them find answers to their health problems, including those of a related socio-economic nature.

A wide range of talents and competencies is needed for broad-gauged prevention and case-finding and for proper long-term care of chronically ill patients. Many professional skills must be carefully co-ordinated and welded into a smoothly functioning team for continuity of service to the patient. A variety of physical facilities and up-to-date equipment will be needed: hospitals, nursing and convalescent homes, rehabilitation centers; x-ray, electrocardiographs, and other specialized equipment. One could go on. Individual and family financial reserves are frequently inadequate to meet the heavy expense of long-term treatment and care, coupled with the associated loss of income. For such cases, it will be necessary to seek the aid of voluntary and official agencies. Major reorientation in the field of community planning and action is essential to meet the total needs.

The health department has an important role in providing assistance in the development of resources to provide the services needed. It may supply a number of them directly, such as x-ray, laboratory tests, home nursing instruction (and sometimes care), nutritional aid, medical social service, and physical therapy.

Mutual co-operation among the patient, the physician, other health professions, the health department, and voluntary health agencies of the community is essential if we are to achieve true prevention and control of chronic disease on a community-wide basis. Occasional, episodic co-operation is not enough. Organized community planning and co-ordination of effort, directed to complete use of existing resources and the development of other necessary services which are lacking, is a basic requirement of a total health program—one which will bring to the people all that modern science has to offer in preventing, minimizing, and controlling chronic disease. Continuing support of such a program by the practicing physician is a challenge to the medical profession, for the physician holds the key to its success or failure. Our traditional practice of

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Chronic Disease—A Challenge to Public Health

By Otis L. Anderson, M.D.
Washington, D. C.

THE PUBLIC health movement in this country has always responded to challenges. At the turn of the century, pioneer health workers responded to the problems of those days—yellow fever, smallpox, typhoid, and the rest—and proved that these diseases could be prevented.

Chronic disease today presents us with the same type of challenge that faced our precursors, who literally developed the public health profession through their triumphs over these major health hazards.

In a nation which, within the past decade, has recognized chronic illness as the paramount health problem, one need no longer plead for acceptance of chronic disease as a legitimate public health concern; it remains rather to identify the manner in which public health workers are already attacking the problem, and to suggest how much more can *and will* be done in the future. Admittedly, much research is needed to further the progress of community application of chronic disease control practices. However, within the limits of our present knowledge, there is still much that can be done.

Impact of Current Public Health Programs on Chronic Disease

Through its present programs, public health exerts its influence in two ways: (1) on the individual directly, and (2) on the individual indirectly, through his environment. Many activities serve both ends. Efforts to prevent or to minimize the effects of chronic illness must be undertaken at every stage of man's whole life-span. Public health is an operation that extends over the full seventy-year cycle of man's current anticipated lifetime.

To start at the beginning, even before birth,

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Dr. Anderson is Assistant Surgeon General, United States Public Health Service.

research is now being conducted which would alter the carbohydrate metabolism of pregnant women with an elevated blood sugar, and thus alter the uterine environment of the fetus, with the aim of preventing diabetes in later life through preventing early damage to the fetal pancreas.

Next in chronological order would come the whole field of maternal and child health services. These services have been strengthened greatly in recent years, and contribute undeniably to the prevention of adult disease.

The fluoridation of public water supplies, which affects the individual from the day of birth, should help to form future communities where it will no longer be true, as it is today, that 56 per cent of all people over sixty years of age are edentulous.

In fact, all phases of protection of the purity of the water supply, and of the food supply, are traditional public health methods of contributing to the safety of the environment, and thus, indirectly, to the health of the individual.

Still dealing with youth, mental health programs designed for children and young people are doing much, and can do more in the future, to prevent mental illness in adults. And mental illness is one of the major chronic diseases of our day.

Health education comes to mind at this juncture as a traditional public health procedure which contributes to the prevention of chronic illness through the inculcation of good personal health practices. Each year, as we gain experience, we recognize more clearly the role that health education plays in chronic disease prevention.

Vaccination against poliomyelitis is an example of a method designed to prevent acute illness and the crippling effects that individuals would otherwise carry with them through life. This is also an excellent example of how, here in America where team-work is a universal ideal, the public health profession and private physicians have cooperated in the interests of the nation's health.

Public Health Programs on the Horizon

No public health program at the present time gives more promise of effective primary prevention in the chronic disease field than does rheumatic fever prophylaxis. By preventing the occurrence, recurrence of rheumatic fever in children, through penicillin prophylaxis, the incidence of rheumatic heart disease can be steadily reduced. Already physicians in private practice and public health clinics are conducting programs for this purpose in many parts of the country.

The prevention of disability and death caused by accidents is a relatively new public health goal. Now that accidents have come to rank fourth among the leading causes of death in the United States (1954) the problem is indeed an urgent one. The newly-created Accident Prevention Program in the Public Health Service is one response to this challenge. At the state and local levels, much effective work is also being done in this field through studies and programs relating to home accidents, human factors in highway accidents, and accidental poisoning.

The attack on community air pollution, which in the last year has been strengthened through Federal legislation (P.L. 159—84th Congress) and substantial authorization of state and local funds, typifies an environmental problem of acknowledged significance to the individual. Research is now being actively undertaken to explore the possible relationship between community air pollution and various types of chronic illness.

As atomic energy develops into a common source of power for peacetime use, the problems of radiation protection will increase correspondingly, and public health must keep pace. Already important research and planning are going forward in this field.

To conclude this selective listing of current and incipient public health programs that are designed to meet the challenge of chronic disease, I should like to mention the work which for so long has been carried forward in the field of nutrition. Public health is especially concerned with the relationship between diet and the development of chronic disease.

A Look to the Future

The challenge of chronic disease is a challenge to public health because it must be met by our communities, as well as by individuals. It is at the community level that an organized attack

against chronic disease must have its beginning. Implementation must then be carried forward through community coöperation. Preventive, curative, and restorative chronic disease programs are all part of one great unity. Our communities must learn to mobilize and integrate all their resources—both public and private—to be successful in their efforts.

In frankly facing the problem of chronic disease, a community, like an individual, can choose between various alternatives in determining the pattern to follow.

I should like to suggest four different ways of viewing this problem:

1. The individual may reject his health problem and hope it will disappear. Communities may react in the same way, elect to "stay in a rut" and do nothing about chronic disease. This is the easiest way, but, of course, it doesn't solve anything.
2. The individual may take the defeatist attitude: accept his health problem in a spirit of hopelessness. The community may make a similar choice, deciding that this major health problem is simply too big a job to be tackled.
3. The individual, anxious and disturbed about his condition, may turn to self-medication or purveyors of "miracle medicines" for help. This course can be paralleled at the community level by seeking a "short-cut" solution, without serious evaluation of resources and needs, instead of developing a program which will truly solve the community's problem.
4. The individual may accept his health problem in a mature fashion and react in a positive manner. It is to be hoped that all communities will ultimately adopt this alternative, and grapple with chronic disease in an organized and efficient manner.

Before we can, as a nation, move forward into large-scale prevention of chronic disease, community planning must be oriented to the problem. Planning, followed by action, must be participated in by responsible members of the health professions, health agencies, and individual citizens. The team approach is essential. Health departments should provide leadership in developing and mobilizing community resources.

Merely to list the kinds of health services required illustrates the need for coöperative effort. The following services must, in one way or another, be made available: detection, diagnosis,

therapy, care for both physical and mental conditions, nursing, restorative services, medical social services, and health education—public, professional, and patient.

Not only should these services be made available, but they must be carefully coordinated for maximum restoration of health and self-dependence to the chronically ill patient. Medical supervision frequently must be continued over long periods of time—usually without requiring the constant attendance of the physician. Home care of the hospitalized patient needs to be planned while he is still in the hospital; home nursing service while the hospital nurse is still on duty. In many instances, there will be need for a social worker, a physical therapist, an employment counsellor, or occupational therapist. Diet restrictions or nutritional problems may require consultation and instruction for the patient and the homemaker. It may be necessary to arrange for employment of a housekeeping aide. Plans for these and other follow-up measures should be part and parcel of the plans for medical service.

Health services must be increased many fold, broadened, and have community-wide support if persons with disabling and handicapping conditions, their families, the community, and the general economy as well, are to be benefited.

Success of the team approach will depend, primarily, upon acceptance of the concept of unity, and recognition of the urgency of finding ways to work together. In a recent talk to the American College of Chest Physicians, the Surgeon General of the Public Health Service* strongly emphasized this point in a way that seems to me most appropriate:

“Group planning and action calls, first of all, for a certain attitude of mind toward the changes that have occurred and the contribution others can make—a tolerance of ways and thoughts which are not necessarily ours; an open mind in the free spirit of science; a ready acceptance of the best from any and every source; an attitude of rational receptiveness rather than antagonism to new ideas.”

The “Team Approach” at Work

How does a community proceed in putting the “team approach” to work? What are the specific steps involved in achieving desired “unity of

action?” I should like to propose six fairly distinct steps—though they will not necessarily be taken in consecutive order, for there is much interweaving among them.

Defining the Problem.—First, the problem must be defined. The community plan for positive action will give priority to meeting those needs which have wide local recognition and which offer opportunity and promise for improvement within available resources. This means that one or several segments of the total chronic disease problem will be selected for action. The phase of the problem chosen will be defined as carefully and specifically as possible.

Current Status of Problem.—Once defined, it is important to determine what the community is presently doing to meet the problem—to sound out the interest and concern of community leaders, health workers, and those most immediately concerned, the chronic disease patients themselves and their families. What health services not now available are needed? What resources are available to provide them?

Assessment of Resources.—Concurrently, another planning activity may be going on—the assessment of resources. Past failure to provide needed services for the chronically ill or disabled may have been due to lack of resources. On the other hand, too limited a view of the community’s potential ability to meet the needs may have been the cause. Skilled health workers with imagination and ingenuity can often uncover sources of assistance, which have previously been overlooked.

Defining Objectives.—In light of these findings, the program goals will be established. With the objectives determined, actual procedures to be taken to reach them can be planned. For example, in developing a chronic disease program, the first step decided on may involve case finding. It has been well established that, in addition to the many people in a community who are known to be chronically ill or disabled, there are others who have the same diseases without being aware of it. What sort of screening or diagnostic program could practically be carried out in order to identify these unknown persons? How can they be brought under medical supervision? What additional services can be provided to help them

*Burney, Leroy E.: What Can Public Health Contribute to the Private Practice of Medicine? Louis Mark Memorial Lecture, delivered to American College of Chest Physicians. Chicago, Illinois, June 7, 1956.

toward recovery, or to stem the progress of the disease?

Plan of Operation.—Step by step, a plan for action is worked out—one which is within community resources, for which interest and support can be enlisted, and which will move toward the objectives set.

Evaluation.—Continually, as the program develops, there is a careful review of what is being accomplished, the methods of operation, the use of resources—to determine whether other ways are more promising, or better procedures are available. The community must be kept informed of progress, the plan must have the participation and interest of every individual and organization that can aid in reaching its objectives.

In this connection, public health can benefit, I believe, by making more use of the skills of social scientists. In solving the problems of the contagious diseases and sanitation, the scientific epidemiological approach has been eminently successful. There is need today to apply this same kind of thinking in solving the problems of chronic illness. Here, however, the emphasis must shift from primary concern with environmental factors to concern with man himself and the individual physiological changes which affect the state of his health. It is necessary to understand how he acts in matters that concern his health—what motivates him to act as he does. Such information provides the means for bringing about improvement in his health behavior. His active understanding and participation are essential to involving him in the chronic disease program to the extent that medical diagnostic procedures may reflect the need for further services. An adequate scientific approach to solution of the chronic illness problem requires the use of skills, concepts, and techniques of behavioral scientists—psychologists, anthropologists, and sociologists—who apply epidemiological methods to the study of man's behavior.

The Health Department as a Member of the Community Team

As a member of the community team, the public health agency is in a position to give leadership through the initiation of co-operative community planning as previously described. I have reviewed some of the current public health activities which are contributing to the prevention and control

of chronic disease. In developing more comprehensive programs, as may be needed, these activities would become a part of the planned community action.

The health department has an important role in providing guidance and leadership for the development of resources to provide the services needed. It may supply a number of them directly, such as x-ray, laboratory tests, home nursing instruction—and sometimes care, nutritional aid, medical social service, physical therapy, et cetera.

It can also arrange to obtain some collateral services from other sources. The ready availability of these community services is particularly important to the physician when coping with chronic illness in the middle and lower income brackets. Through its broad educational activities, the health department can also supplement the efforts of private physicians in promoting action which individuals must take to protect and improve their own health. Health department nurses through their regular home-visiting programs can smooth the chronic disease patient's difficult transition from the period of intensive hospital treatment to the phase of long-term home care.

In a discussion of the changing health picture in North Carolina,* the state health officer's concept of the role of the health department was summed up in this fashion:

"I again express the belief that we (the public health profession) can work out a program in the control of health problems in the non-communicable field, that will be ethical, acceptable and effective, encroaching upon the prerogatives of none. All public health programs directed against these problems will have but one objective, that is, to promote early private medical care for the patient, and to insure the success of that care, by providing to every physician, where needed, the services of trained personnel, in case-finding, follow-up, and rehabilitation."

It is a sound position, forthrightly expressed, I think. To it, I would add that in carrying out those programs which have long been regarded as more exclusively the health department's responsibility, greater attention should be given to the prevention of conditions which may become chronic.

(Continued on Page 639)

*Richardson, William H., The Changing Health Picture in North Carolina. The Health Bulletin of the North Carolina State Board of Health. Vol. 71, No. 7, July, 1956.

Evidence on Aging

The modern concept regarding the problems usually associated with the aging process and aged persons has undergone considerable revision since large numbers of physicians have become interested in gerontology and more versatile in geriatrics. Gerontology is the study of the aging process itself and geriatrics is the application of gerontological knowledge to those aging persons who may come under their observation, management and treatment.

Aging is inevitable. Perhaps this is iterating a very old observation but it refers to the passage of time which no one can escape. Many other deterrents to a more desirable aging process can be escaped so that it approaches the normal state. With judicious guidance, more persons than ever before may hope to attain comparatively healthy and vigorous later years. They may hope to avoid some of the mistakes made by older persons in other times and some of the pitfalls along the way to purposeful and healthful mental and physical later life. To be without a purpose in life is to have lost one of the most important reasons for living. To be without health makes all else seem purposeless.

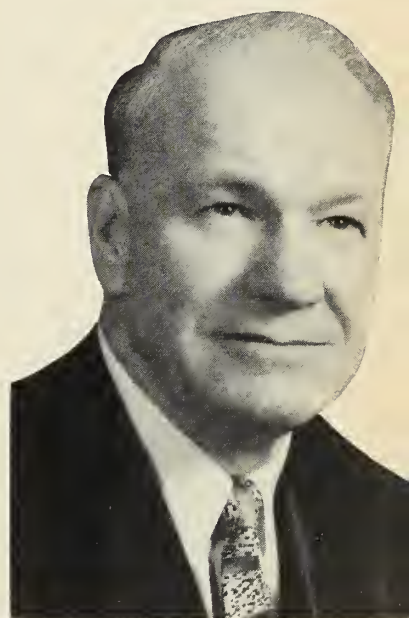
The loss of elasticity which is nearly always a concomitant of the aging process can be forestalled somewhat by keeping active; therefore, complete retirement at any age should be discouraged. The chronological age of sixty-five years at which so many persons retired either voluntarily or involuntarily is not a good criterion for terminating useful work of some kind. It has been outmoded by all the evidence at hand.

The loss of some physical strength should be recognized and adjustments made in the physical work or activity. Putting forth more energy to accomplish the things once done with relative ease is not a rational solution. Work should be changed to conform to the worker's strength. Older housewives or those with heart ailments who should conserve their energy may have their kitchens rearranged so as to save themselves noticeable toil, exertion and extra steps.

The loss of rapid recuperation after exertion is more or less normal among older persons. They tire more quickly and the return to normal following activity is somewhat delayed; therefore, long duty and monotonous work should not be continuous but should be interrupted by rest periods, holidays and vacations.

On the other hand, complete idleness is not a desirable manner in which to promote good health among the aging, and those who choose to do nothing soon become decrepit.

President's



Message

Rich Walls M.D.

President, Michigan State Medical Society

Editorial

GERIATRIC MEDICINE

Geriatric medicine occupies each year a greater part of the physician's time. As more people live to be sixty to ninety years of age, the greater is the incidence of those illnesses most common to our later years. More time than ever before must be given to the clinical problems of aging individuals, and the doctor must prepare himself for this change in his practice.

During the past few years, we have read in these pages, as well as in almost every other medical journal, articles having to do with the treatment of illnesses in the older person. Except for the pediatrician and obstetrician, all specialties must be concerned. The general practitioner, however, will continue to see more people at this age than any other group of physicians and it is for them in particular that state medical journals should provide authoritative as well as practical articles for their reading.

Your Geriatric Committee has felt that anything we could do preventive-wise would be of infinitely more value than treatment after illness had already developed. Three years ago, a whole issue of *THE JOURNAL MSMS* was devoted to a discussion of a wide variety of subjects having to do with preventive geriatrics. It was presented in the form of a panel discussion in which a large number of individuals took part. It served as an introduction to the issues which were planned for the future.

This year, Dr. Fred Swartz, our vice chairman, has again accumulated a great deal of material on nutrition and exercise as it affects health later in life. It is our belief that if health can be maintained, at an optimum level, through the application of good preventive measures, the development of many of the illnesses of the older person could be prevented.

In a subsequent issue, it is planned to present another discussion with particular emphasis; this time, upon the psychosomatic, emotional and psychiatric factors affecting the lives of older people.

We believe with Anton J. Carlson, there is reason to hope that with continuing study and better application of what knowledge does exist not only can the life span be extended further but

also the period of usefulness to the community may be prolonged. Longevity without continued health and usefulness is not a blessing.

A. HAZEN PRICE, M.D.

JUNE IS MULTIPLE SCLEROSIS MONTH

Despondency and despair have always been associated with multiple sclerosis, due mainly to ignorance or misinformation of the true facts. Even in places of good repute, the patient in his search for a "cure" is invariably told that nothing can be done for him, thus robbing him of all hope. This hopeless attitude, adopted by the patient, is the challenge taken up by the Michigan Multiple Sclerosis Center. Here a ray of hope is given to him; not a promise of a cure, but a treatment which enables a better way to maintain a relationship with his environment than he had before.

This Center is unique in that it devotes all its time and energies to multiple sclerosis alone. The best of facilities for medical diagnosis and treatment are provided. Research is also continually in progress in the field of multiple sclerosis. Better public relations are being established by means of distribution of literature, presentations of TV programs, and lectures which point out that the outlook is far from hopeless.

Because of the multiple disabilities associated with this disease, a very efficient, sympathetic, and well-trained staff is essential for treatment. Involvement may cause ataxia, spasticity, speech and visual defects, incontinence, and other disabilities. Another factor which makes it difficult to work with this type of patient is that some have a great fear of falling due to previous falls and will not be co-operative when being treated. Others are over-anxious to improve, so take foolish risks when moving about and will not heed warnings. Many ask a great number of questions concerning their condition which require a good deal of wisdom to answer. Those working with these patients must not be too encouraging, thus raising false hopes, or too discouraging, thus causing despondency. A compromise must be made to give comfort to the patient.

GABRIEL STEINER, M.D.

BASIC BLUE SHIELD PRINCIPLES

The medical prepayment program of the whole medical profession was based on a few fundamental principles. The concept became established before a vast percentage of our present active members ever finished medical school. Hopefully, they will never again see conditions like those that confronted us then. There has probably never been a time in historic memory when comprehensive or even adequate medical care was available to all our suffering people. The well-to-do and the securely employed persons could and did have the services of the medical practitioners with the best knowledge and facilities available at that time.

The indigent have always been with us, and in most instances there were charitable hospitals to which they could go. In modern times, the state has assumed responsibility and provided for these same people through the social welfare departments.

Long continued years of desperate want and frustration proved that even the reasonably employed persons found that medical conditions calling for hospitalization could become calamitous. Michigan doctors (and others) evolved Blue Shield and Blue Cross to ensure medical and hospital care for all with foresight enough to subscribe and contribute small payments in advance. Under-income-limit persons only were to be accommodated. The very first group proved there could be no prohibition to the ones just over this arbitrary income limit. In order to insure and guarantee service to the really needy, it was better that some others also be protected. Unauthorized usage might develop, but the profession believed the great benefit to the most worthy was our conscientious duty. The immediate success of prepayment for services—not insurance—was adequate proof of the foresight and dedication of medicine's pioneers in an utterly new field of service.

THE CHANGING TIMES

Nearly two decades have passed. Economic, social and political conditions are different. A new generation is now enjoying almost unbelievable advantages as compared to the times which fathered the Blue Cross-Blue Shield economic miracle. Practically anyone who wishes may have a job, with reasonable hours of work and suffi-

cient pay to care for his family, especially if he has moderate forethought. Medical care of the highest quality is available when and if needed. We also have a new generation of doctors who never saw hard times. They finished school after the great depression, never knew the tedium of waiting in their offices for their first paying patient; never went through the rigors of trying to collect for services gladly rendered but long after the patient and his family had forgotten the anguished pleas, "Doctor, spare no expense." "Insurability" of medical care was an established fact, with large percentages of the population "insured."

Far too many doctors and far too many patients are mistaking the advantages now available as just a "rich insurance company" which can and will pay even unauthorized, or unincluded claims. They do not remember, or charitably do not know, that the voluntary prepayment medical care plans are not insurance companies but actually ourselves, our own medical societies selling our own actual services to our own patients! Selling these services in advance of need instead of the age-old custom of caring for the patient and then rendering a bill weeks or months later. In thinking of some physicians, due to the present prosperity, even the need of prepayment health insurance plans has become obsolete. Recalling such facts, and dedicating our efforts to the needful care; being available when called; not using unnecessary diagnosis or treatment factors will again place our profession in the kindly affections of our patients.

GOVERNMENT CARE

Government medicine is spreading all about us, and the future doesn't look to be much different. A sizable portion of the old Wagner-Murray-Dingell bills have been enacted piecemeal during the years.

Besides the members of the armed forces and other governmental quotas which are necessarily given government medical care, many of the families are being included in the new Medicare. Of our 22.5 million veterans, uncounted numbers are eligible and are getting free care in the Veterans, Hospitals. Each Congress presumes a number of conditions to have been "service-connected." Care for older people is increasing. It now covers many millions who have inadequate resources, some

are on Social Security and some on relief. It has recently been proposed to give OASI persons up to sixty days hospitalization per year which, including Medicare, might add another 14 million persons to the government medical care burden.

A new Dingell bill levying a percentage tax on every employed person and his employer is in the making. It sounds inoffensive. A new government bureau in HEW will pay the bills for doctors and hospitals. How long can that last before doctors will be under coercion, working for the government, and reportable to the government? The world has now reached another and different economic socio-medical era which calls for a brand new deal.

Some form of prepaid insurance has been proposed by the HEW officials to care for the aging and the marginal groups who just cannot provide for or anticipate medical needs. "Coinsurance" was suggested and abandoned. It is claimed that existing insurance cannot cover this need without help—that is true—but Blue Shield, which is service and not insurance, has always provided that any person in a group no matter what his age may continue as an independent subscriber when he retires from the group. A person over sixty-five may not join as an individual, but may in a group of employed persons.

Years ago, the Michigan State Medical Society expressed the opinion that when government is paying for medical care for its wards, they are no longer indigent, and the medical care as well as food, clothing, and shelter should be paid on an acceptable rate, not cut in half as had been the custom. The society, therefore, established a fee schedule for government agencies.

Government could recognize the facts of life and contract to use the available insurance principle to care for its economically uninsurable.

FAULTS AND REMEDIES

The Governor's Committee last year uncovered widespread demand for more extensive care than Michigan Medical Service is now giving and some serious criticisms of the too frequent extra charges being made. Labor has demanded certain office and out-patient diagnosis and care, together with a guarantee of full coverage under the contract. Labor has started to organize its own service plan, stressing groups and clinics with salaried doctors and a prohibition of all extra charges.

A fast-growing complaint, possibly inspired, is the difficulty of getting doctors to make calls after hours or at night. This is serious, and some cities are making efforts to have certain doctors on special call every night.

All these complaints and criticisms point to another "big look" on our part. Twenty years ago the profession was in trouble from several sources and solved its problems then by united and concerted efforts as a cohesive body. Blue Shield and its administration was the answer. Now we seem to be in trouble again. Some farsighted members are trying to show the road to light. They have analyzed the situation, made repeated and extensive studies and are now proposing a new evaluation. We need not only leadership, *but sacrifice of personal and individualistic ideas and a united front*. The "enemy" is clearly outlined. The basic contract of Blue Shield with some modifications is still the primary anchor. "Comprehensive" or at least well-extended services, office and out-patient surgery, laboratory diagnosis, consultation, assistants, diagnostic and therapeutic radiology must be made available. The medical profession must also reinstate itself in love and respect by always being available for emergency calls. Someone should be ready if the doctor called is busy. Our most numerous competitors have seen this opportunity, grasped the chance and taken too many of our patients.

Our first and foremost duty to our patients is the very best medicine of which we or our confrères are capable. We have been taught all the methods of diagnosis, how to interpret laboratory and other intelligence and are freely using our facilities. However, we were not generally told how expensive all these tests are, or how little money a family is likely to have after paying the ordinary running expenses. We should all have been taught—and should all remember—never to order or inflict an unexpected and unnecessary expense unless we are looking for a "new deal" with some pressure group, or government, pulling the strings. Our second duty is to the patient's economic ills. Response to that duty in the 1930's created Blue Shield.

VETERANS' CARE

Care of veterans with service-connected disabilities is to be continued. The Michigan Plan was developed about ten years ago involving sim-

plified and short report forms. The program continued for years but finally there were only eight states still active. The disabled veterans work in other states is on direct contract between the doctors, the patients and the government, mostly being through Veterans' Hospitals or Clinics. About a year and a half ago, the director of Veterans' Affairs notified all the states involved, that the program would be discontinued as of last July first. Conferences in Chicago by the State Medical Societies and Medical Service Plans involved resulted in a visit to Washington, a hearing, and a revocation of the termination notice. Recently, a new order came from Washington again terminating all service-connected veterans' hometown care through the Societies and Service Plans. Another committee meeting in Chicago, this time with the AMA having an observer, another visit to Washington, various lay representatives from several states, Michigan sending three doctors, and South Carolina sending one, again met with success. On March 13, word came of the complete success of the committee and the adoption for all areas of the Michigan Plan of Care. The veterans' service-connected hometown medical care will continue.

The short, logical forms developed by John Castallucci at the very first have proved adequate and are being used and printed by the Federal Government. In return, these eight states and Hawaii have agreed to a uniform contract, which really is a benefit to the Veterans Administration.

NOTE: Word from Washington April 17, 1957, indicates uncertainty and the necessity for more conferences.

BLUE SHIELD COMMISSION

The annual conference of the Blue Shield Commission was held in San Francisco, March 24 to 28, 1957. Robert L. Novy, M.D., of Detroit, presided as national President. The meetings were attended by the Commission and by trustees, administrators and staff members who seemed obligated or who could go for the semi-vacation. It was an intensive program of the working variety.

The Blue Cross Commission held its conference simultaneously. Present and taking part were R. L. Novy, M.D., Jay C. Ketchum and C. D. Moll, M.D., all of Detroit. There were twenty-seven prepared speeches in Blue Shield and twenty-three for Blue Cross by eminent men in their respective fields—university professors, government officials, plan directors and labor representatives.

Speeches, discussions and bull sessions developed a few important facets of the voluntary medical and hospital programs. We were told that in general the voluntary programs are doing a good job, not over-priced—rather the opposite, and with some effort can be sold to a much more critical public than in the past. There is danger that we may make our plans so expensive that people in the ordinary buying class, the workers, and employees who must live on their earnings will be unable to buy. From all over the nation come problems and questions of policy or procedure, demands here, complaints there. Some facts are outstanding:

1. Labor is complaining bitterly that our plans are not inclusive enough; that the doctors make too many overcharges; that no prophylactic service is offered; patients too often hospitalized for the convenience of making several calls at one place; or the difficulty of getting the doctor at night.

2. Most of the members thoroughly believe that Blue Shield is not insurance run by an insurance company with plenty of money and more if that is not enough, but that it is our own medical society operating in a different field, rendering just as important service to our patients and their needs. We should never change that belief.

3. There is a tremendous necessity of educating our members to the fact that since the medical profession has demonstrated the feasibility of pre-paid medical service, we must not now surrender to the numerous handicaps and hindrances being displayed, but must again demonstrate to our public that the medical profession is ready and can meet this present obligation.

4. The insurance counsellors, the State Commissioners of insurance, all believe our plans are in fact insurance, for they are most of them administered by the state insurance commissioners, even if their enabling acts do classify them differently. We must all follow insurance practices, rules and laws.

5. It is the universal belief that Blue Shield and its counterpart, Blue Cross, in the early forties did stop the firmly determined pressure toward compulsory health insurance administered by the Government and stopped socialized medicine. This was done by concerted and determined objective action.

6. Many of our speakers expressed the conviction that the independent practice of medicine in

the well-recognized American style is again in utmost danger from several sources: pressure groups, bureaucrats in the government, demands by the lower income persons for more assurance of full care; resentment against some very obvious mispractices.

7. The pioneers of yesteryear who carried the burden in the past score of years are just as enthusiastic and confident that the men of medicine still have the vigor, the daring, the confidence, the knowledge, the same dedication and genius to find again the true path to preserve once again the American way of life. They believe the public will respond.

8. In the past experience, there were many sacrifices of personalities and individualities accepting ultimate good as most necessary. More sacrifices are needed and will be just as willingly given.

Gleanings

Blue Shield's basic philosophy is service to subscribers, mainly aimed at lower income groups. *It is much better to endure a few abuses or misapplications in order to make sure the worthy and needy will not fail to receive their just benefits.*

HEART SPECTACULAR

Millions of people saw Jim Blodgett operate on mitral stenosis as presented over WWJ-TV. For weeks afterwards, this was the topic of conversation. In their own living rooms, people saw the ultimate in surgical miracles. Drama of life and death—life triumphant! What the public didn't see was the antecedent work, laborious research that preceded the skillful presentation of operative victory of the modern knight. He is the first to acknowledge his obligation to his contemporaries and those who have gone before. And the doctors of Michigan are in the forefront of those who unravel the mysteries and contribute to the understanding of the heart.

In 1896, George Dock, professor of medicine at the University of Michigan, published the first report in the English language of the clinical features of coronary thrombosis and myocardial infarction, the second report in the world literature. It was two generations later that this understanding was diffused to the medical profession. We never saw a clinical case of coronary thrombosis at the University of Michigan when we were stu-

dents. The great Warthin showed them to us at the autopsy table. What medicine owes to Warthin!

Next at Michigan is Wilson. No further identification is necessary for physicians any place in the world. He is the most famous throughout the world of Michigan medical teachers. An authority on the heart and teacher of electrocardiography, he made available to physicians the understanding and use of this instrument. In 1934, Wilson and his associates reported the use of the central terminal for obtaining so-called unipolar electrocardiographic leads, chiefly precordial leads. In 1929, a patient who required surgical drainage for suppurative pericarditis afforded an opportunity for Paul Barker of Wilson's group to stimulate the exposed ventricles electrically and record the responses electrically; these observations by Barker led to a correction of the previous erroneous interpretation of bundle branch block curves. Wherever physicians treat the heart, they are familiar with the great names of Wilson and Barker.

In 1938, Wilson and F. D. Johnson were the first to record vector cardiograms by means of the cathode ray tube. Johnson succeeded Wilson in the famous chair in cardiology at Ann Arbor.

Detroit workers have contributed with distinction in the understanding of the heart. Everyone is familiar with the work of Gordon Myers as researcher and teacher, professor of medicine at Wayne State University Medical School. His lectures on electrocardiography are a worthy succession to those of Wilson. Myers has published books on the electrocardiogram and his papers on correlation of the electrocardiogram and infarction are said by Prinzmetal to be the most significant published. His post-graduate courses on the heart draw attendance from all over the United States and abroad.

With the development of modern anesthesia to equal status with surgery, operations are routine that were previously only dreamed about. With modern anesthesia, pumps for shunting the blood around the heart and oxygenating and returning to the body can be used. In Detroit, Dodril, of Harper Hospital, led the way in developing the heart pump with which he was able to pioneer in heart surgery.

Any mention of heart at Harper Hospital brings to mind the large series of Gene Osius in vascular surgery. And always mentioned are the many

students and practitioners who are obligated to Bob Novy for learning about the diagnosis and treatment of coronary heart disease; he has the diagnostic drive interest of youth, aggressively learning, tempered with the maturity of judgment that comes to those of great experience. A great name, Novy.

At Ford Hospital, Szilagyi is doing impressive work, removing diseased aorto-iliac and femoral occlusions and replacements with homografts and woven chemical substitutes! New aortas for old! Also Ziegler, of Ford Hospital, has clarified the subject of infant cardiology and the congenital heart. He utilized cardiac catheterization, without which the understanding and operations on congenital heart lesions could not be undertaken. He is the author of a textbook on pediatric cardiology; pediatric electrocardiography. Janny Smith brought Detroit to notice and prominence in heart circles with his oft quoted work on anti-coagulants and coronary thrombosis; he has been the moving force in development of understanding of heart disease at Ford Hospital.

In rheumatic heart disease in Michigan, there are two outstanding men. Rosenzweig, of Children's Hospital and Detroit Receiving Hospital, has a series of more than a thousand cases, and his clinical teaching of rheumatic heart disease and congenital heart disease has made commonplace what used to be an intricate puzzle. He has given a lifetime to the care of sick rheumatic children. Clarke, of Providence Hospital, has focused on the understanding of rheumatic heart disease and its treatment. He is very proud that he has one of the few M.S. degrees in cardiology presented under Wilson of Ann Arbor. He has been working on the di-hydroxy and tri-hydroxy homologues of salicylic acid in treatment of rheumatic fever. He is one of the first to note that T-wave changes, resulting from severe blood loss in intestinal hemorrhage could mimic coronary heart disease in the electrocardiogram. He is now doing work of promise with versine in atheromatous vascular lesions in angina and cerebrovascular strokes.

At Receiving Hospital, the teaching hospital of Wayne State University, in addition to Gordon Myers' monumental work in medicine, there is Harper Hellems who trained a whole group in cardiac catheterization. As mentioned, it is work like his that makes feasible a bold surgical approach and cure of the cardiac cripple. The sur-

geons, Jacobsen and Wible, at Receiving Hospital under C. G. Johnson, have been busy in heart research. Their latest achievement is the use of a spring valve inserted in the heart to correct mitral insufficiency.

Michigan has made history and is writing its chapter on heart disease—its understanding, treatment and cure. We thank Jim Blodgett for dramatizing on television the achievement of all these medical doctors.

DAVE SUGAR, M.D.

CORRECTION

In the March issue of *THE JOURNAL*, page 360, appeared an editorial entitled "Deaths Balance Births," which should have read "Deaths Around Birth," dealing with the perinatal time. We have checked the galley proofs which did read "Deaths Around Birth." How this change occurred we have no explanation, and we had no knowledge of the change until our attention was called to it by Dr. Goldie Corneliuson. We are making this explanation so that our readers may mark this correction in their copies of *THE JOURNAL*.

EDITOR

MSMS ANNUAL MEETING

September 25-26-27, 1957

Civic Auditorium, Pantlind Hotel

Grand Rapids

→ Make your hotel reservation now ←



Record Set!

Michigan Clinical Institute Success Story

The excellence of the scientific program, the widespread advance publicity and the extraordinarily favorable weather contributed to the outstanding success of the 1957 Eleventh Annual Michigan Clinical Institute—a meeting which used to be known as the “little session.”

Attendance at this year's meeting, held traditionally in Detroit, surpassed 1956 totals by 766. Doctors of medicine registering during the three-day postgraduate session numbered 1,654, an increase of 231 over 1956. Guest registrations soared also to a total of 845, including dentists, veterinarians, nurses and medical students.

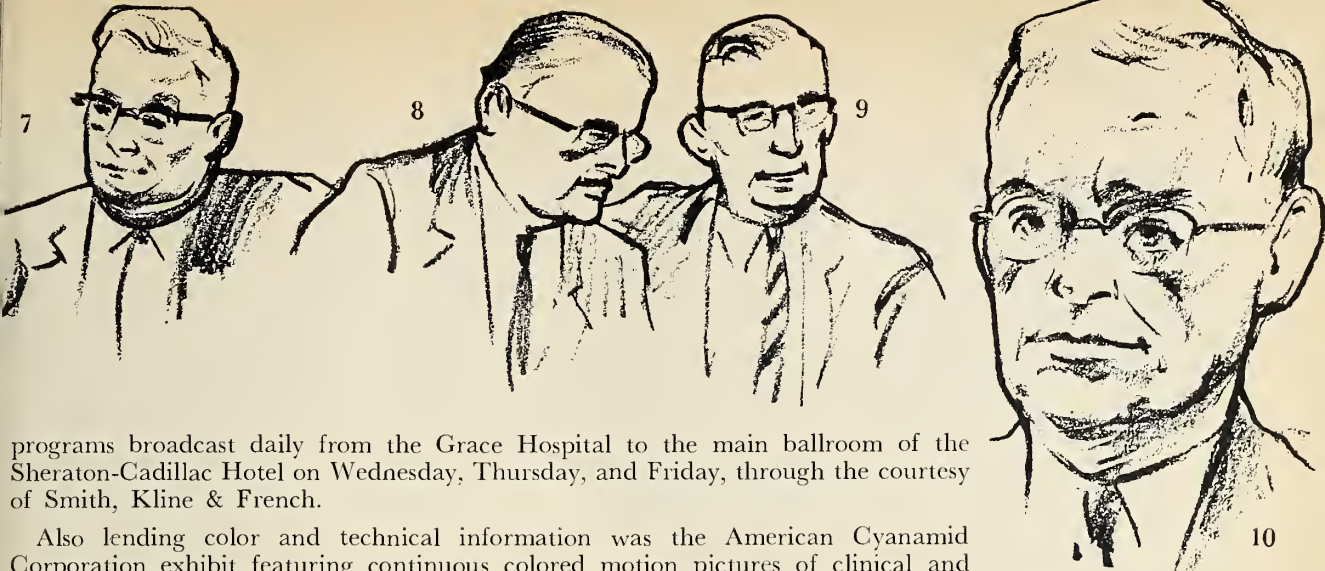
High point in the week's events was the telecast to the general public of a live mitral commissurotomy operation performed by James B. Blodgett, M.D., Detroit, from the operating rooms of The Grace Hospital, on Tuesday, the eve of the MCI opening. The hour-long program was carried by WWJ-TV in compatible color. Lansing area viewers also watched the significant display of the techniques of modern medicine by means of a network hookup. Subsequently a kinescope of this program was used on several other Michigan TV stations.

The program marked the first time an actual operation had been broadcast live to the public in Michigan and was the second such telecast in history.

Sponsors were the Michigan State Medical Society, Wayne County Medical Society and the Michigan Heart Association, in co-operation with Smith, Kline & French Laboratories, technical producers of the show.

Chairman of the MCI Television Committee was Dan W. Myers, M.D., of Detroit. The Committee was also responsible for the closed circuit clinical TV





programs broadcast daily from the Grace Hospital to the main ballroom of the Sheraton-Cadillac Hotel on Wednesday, Thursday, and Friday, through the courtesy of Smith, Kline & French.

Also lending color and technical information was the American Cyanamid Corporation exhibit featuring continuous colored motion pictures of clinical and surgical procedures.

Because of a bulging program, presentation of papers by thirty leading medical authorities began at 8:30 a.m. in order to accommodate speakers and the daily clinical television programs.

Formal presentation of Michigan's Foremost Family Physician Award was effected on Thursday noon at a special Testimonial Luncheon honoring both medical and lay persons for their accomplishments and contributions to health and medicine. The luncheon was arranged by G. B. Saltonstall, M.D., who served as toastmaster. Arch Walls, M.D., MSMS President, presented the awards to the honorees.

Ralph G. Cook, M.D., venerated Kalamazoo doctor, sportsman and Indian Chief, received the Foremost Family Physician award following his selection by the MSMS House of Delegates in September. An identical citation was awarded posthumously to Joseph H. Sherk, M.D., of Midland, who passed away shortly after his nomination. Mrs. Maurice Ittner accepted the scroll for Doctor Sherk's family, as a representative of the Woman's Auxiliary to the Midland County Medical Society.

Special tribute was paid to eight Michigan doctors of medicine who are currently serving as presidents of national medical organizations. Those honored were: J. S. DeTar, M.D., Milan, American Academy of General Practice; Ann Arbor doctors, Cameron Haight, M.D., American Association for Thoracic Surgery; Norman F. Miller, M.D., American Gynecological Society and William D. Robinson, M.D., American Rheumatism Association; and the following doctors from

1957 MCI Registration	
Here is the final tabulation of registrants at the Eleventh Annual Michigan Clinical Institute at the Sheraton-Cadillac Hotel, Detroit, March 13-14-15.	
Doctors of Medicine.....	1,654
Nurses	334
Guests (dentists, medical students, veterinarians)....	845
Exhibitors	410
TOTAL	3,243





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Detroit, Charles G. Johnston, M.D., American Association for the Surgery of Trauma; Rupert C. L. Markoe, M.D., American Academy of Tuberculosis Physicians; Edgar E. Martmer, M.D., American Academy of Pediatrics; Robert L. Novy, M.D., National Association of Blue Shield Medical Care Plans.

Distinguished Health Service awards were also presented at the luncheon to non-members of the medical profession. Mr. Jay C. Ketchum received an illuminated scroll from MSMS for his nationally recognized leadership in the field of prepayment medical service. Five other awards went to: Labor Commissioner John Reid for his many years of service as a Director of Michigan Medical Service; Representative Arnell Engstrom, Senator Clarence F. Graebner, Senator Perry W. Greene, and Senator Elmer R. Porter. The members of the Michigan legislature were recognized for their support of the finer principles of medical education and medical care as chairman, respectively, of the House Ways and Means, The Senate State Affairs, Senate Public Health and Welfare and Senate Appropriations Committees.

One Outstanding Health Service citation was awarded this year to Radio Station WHAK, Rogers City, for two years broadcast of health information programs. The scroll was accepted by the station's president Harvey A. Klann.

The guests at the Testimonial luncheon heard an address by Wayne State University President Clarence F. Hilberry, Ph.D.

Several MCI speakers were honored at special luncheons on Wednesday and Friday. L. Henry Garland, M.D., San Francisco, and Charles B. Huggins, M.D., Chicago, were presented with citations at a special luncheon Wednesday, sponsored by the Michigan Division and the Southeastern Michigan Division of the American Cancer Society. J. W. Hubly, M.D., of Battle Creek, served as chairman of arrangements.

On Friday, March 15, the Michigan State Pharmaceutical Association honored Mr. George P. Larrick, of Washington, D. C. Mr. Larrick is the Commissioner of Food and Drugs of the U. S. Department of Health, Education and Welfare.

Howard B. Sprague, M.D., of Brookline, Mass., was the guest speaker at the public Annual Meeting of the Michigan Heart Association in the Sheraton-Cadillac Grand Ballroom. The subscription dinner was attended by more than 250 guests who saw The Honorable Charles E. Wilson receive a scroll of appreciation for his service to the organization as Board Chairman.

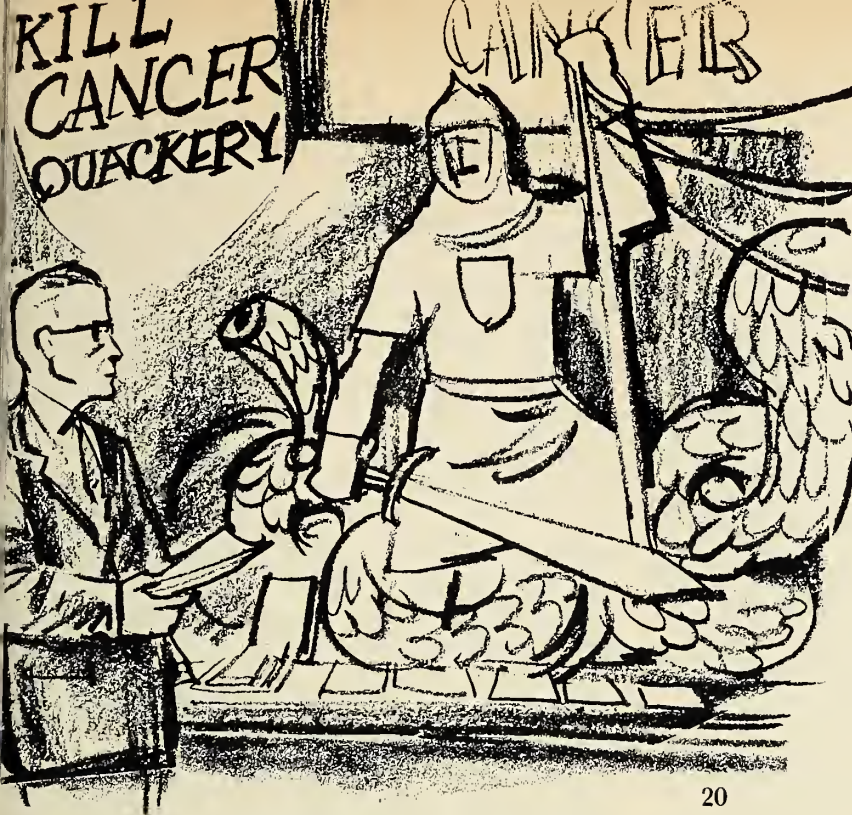
In all, seventeen meetings of special societies, alumni and ancillary groups were held in conjunction with the MCI.

An important sidelight of the MCI was the Wednesday night Panel on Tranquiling Drugs held in the Grand Ballroom and featuring a panel of doctors from the University of Michigan: R. W. Waggoner, M.D., R. W. Gerard, M.D., and J. G. Miller, M.D.

News interest in the week's scientific activities was unprecedented. Stories on



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20

Identification of Illustrations*

- | | |
|--|---|
| 1. Julius Bauer, M.D., Los Angeles, Guest Essayist. | 6. General view close-up. |
| 2. Fredrick C. Swartz, M.D., Lansing. | 7. Sen. Clarence F. Graebner, Saginaw, Distinguished Health Service Awardee. |
| 3. A. Hazen Price, M.D., Detroit. | 8. Sen. Perry W. Greene, Grand Rapids, Distinguished Health Service Awardee. |
| 4. Howard B. Sprague, M.D., Brookline, Mass., Guest Essayist. | 9. Sen. Elmer R. Porter, Blissfield, Distinguished Health Service Awardee. |
| 5. Wm. M. LeFevre, M.D., Muskegon, Guest Essayist and Program Chairman, MCI. | 10. Ralph G. Cook, M.D., Kalamazoo, Michigan's Foremost Family Physician. |
| | 11. Rep. Arnell Engstrom, Traverse City, Distinguished Health Service Awardee. |
| | 12. Jay C. Ketchum, Detroit Executive Vice President, Michigan Medical Service, Distinguished Health Service Awardee. |
| | 13. Gilbert B. Saltonstall, M.D., Charlevoix, Chairman, MCI Testimonial Luncheon. |
| | 14. Claude L. Weston, M.D., Owosso, Member, MCI Press Committee. |
| | 15. A. B. Gwinn, M.D., Hastings, Chairman, MCI Press Committee. |
| | 16. Otto O. Beck, M.D., Birmingham, General Chairman, MCI. |
| | 17. L. Fernald Foster, M.D., Bay City, Secretary, MSMS. |
| | 18. Ralph W. Shook, M.D., Kalamazoo, Chairman, MSMS Finance Committee. |
| | 19. Arch Walls, M.D., Detroit, President, MSMS. |
| | 20. Cancer Exhibit—B. E. Luck, D.D.S., Lansing. |
| | 21. Maternal Health Exhibit—Charles A. Behney, M.D., Michigan Department of Health, Lansing. |
| | 22. Lester P. Dodd, Detroit, MSMS Legal Counsel. |
| | 23. Wilfrid Haughey, M.D., Battle Creek, Editor, Journal, MSMS. |

*See preceding pages for illustrations numbered 1-19 and 22-23.

the MCI, and particularly in the live heart operation, began appearing a week in advance in papers all over the state. Individual stories on the scientific papers were still running in Detroit newspapers on Saturday. And reports on the "heart" patient's recovery appeared as late as two weeks after the meeting.

Assisting the various news media in obtaining information and arranging interviews was the Press Relations Committee; A. B. Gwinn, M.D., Hastings, Chairman; H. F. Dibble, M.D., Detroit; L. R. Leader, M.D., Detroit; J. J. Lightbody, M.D., Detroit; Ralph W. Shook, M.D., Kalamazoo; and C. L. Weston, M.D., Owosso.

Co-sponsoring organizations, who played an important part in the success of the 1957 MCI include: Michigan State Medical Society, the medical schools at University of Michigan and Wayne State University, Michigan Cancer Co-ordinating Committee, Wayne County Medical Society, Michigan Heart Association, Michigan Foundation for Medical and Health Education, Michigan Chapter—American College of Surgeons, Michigan Regional Committee on Trauma—American College of Surgeons, Michigan Department of Health and Michigan Public Health Officers Association.



REPORT OF KNOTSMAN & SMITH, CPA—1956

The Council, Michigan State Medical Society:

Pursuant to your request, we have examined the Statement of Financial Condition of the MICHIGAN STATE MEDICAL SOCIETY, Lansing, Michigan, as at December 24, 1956, and the related statements of income and expense and fund transactions for the year then ended. Our examination was made in accordance with generally accepted auditing standards, and accordingly included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

In our opinion, the accompanying Statement of Financial Condition and related statements of income and expense and fund transactions, present fairly the position of the MICHIGAN STATE MEDICAL SOCIETY as at December 24, 1956, and the results of its operations for the year then ended, in conformity with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

KNOTSMAN & SMITH
Certified Public Accountants

Lansing, Michigan
January 7, 1957

The following comments are submitted relative to our examination of the MICHIGAN STATE MEDICAL SOCIETY, Lansing, Michigan, for the year ended December 24, 1956.

HISTORY

The MICHIGAN STATE MEDICAL SOCIETY was organized on September 17, 1910, under the laws of the State of Michigan, as a non-profit corporation. The charter has been extended for a period of thirty years from September 17, 1940. The Society is affiliated with the American Medical Association, and it charts county medical societies within the State of Michigan. The purposes of the Society are the promotion of science and art of medicine, the protection of the public health, and the betterment of the medical profession. In the furtherance of these purposes, the Society publishes "The Journal of the Michigan State Medical Society."

COMMENTS

The regular society bank account maintained at the Michigan National Bank, Lansing, Michigan, was confirmed by direct correspondence with the bank as at December 24, 1956, and the balance thus obtained was reconciled to your books of account.

The balance in the Treasurer's account is in accordance with a letter from the Michigan National Bank, Grand Rapids, Michigan, dated December 28, 1956, addressed to Mr. Robert Roney.

Cash in the Lansing office, in an amount of \$36.61, was counted by our representative. Detroit petty cash of \$50.00 was not verified.

Confirmation of Accounts Receivable have been mailed. A very small number of replies have been received due to the early date of this report. Any negative replies will be reported to your office. An aging analysis of the accounts by the month of charge is as follows:

October, November, December.....	\$22,265.52
July, August, September.....	528.20
Over Six Months.....	119.99

TOTAL\$22,913.71

Insurance premiums due from employees are reimbursed to the Society via a payroll checkoff.

A summary of the 1956 premium cost is as follows:

	Total	Society Share	Employee Share
Premium—1 year.....	\$19,718.84	\$10,640.21	\$9,078.63
Refunds and Adjustments.....	1,437.11	849.60	587.51
Net	\$18,281.73	\$ 9,790.61	\$8,491.12
Collections from Employees.....	7,878.73		7,878.73
	10,403.00		612.39
Due from Employees in January 1956	612.39		612.39
Net Society Cost.....	\$ 9,790.61	\$ 9,790.61	\$

Investments as set forth in Schedule 10 were confirmed in a letter to Mr. Roney from the Michigan National Bank, Grand Rapids, Michigan, dated December 28, 1956. We did not count these securities, nor was a confirmation letter sent to us directly from the bank.

Property and equipment are set forth in schedule 11. Office equipment is charged to expense when purchased and hence is not set forth as an asset of the society.

The distribution of such general expense items as office supplies, printing, telephone, repairs and equipment to the various society functions is very burdensome and time consuming to your accounting department. We suggest that Mr. Roney be authorized to charge these minor items to their respective expense category without attempting to distribute them to each small function.

Membership dues for the period were reconciled to paying members of 5,541. Of the 6,053 cards used we were able to account for 6,051.

The Annual Session and the Michigan Clinical Institute booth space income was verified by us and a spot check of JOURNAL Advertising was in agreement with your books of account.

Prior years 1% unallocated collection items due county societies were closed to miscellaneous income in an amount of \$1,398.35 upon our suggestion.

Net gain for all society functions for the year ended December 24, 1956, was \$40,060.31 as combined in Exhibit "C" of this report.

Respectfully submitted,
KNOTSMAN & SMITH
Certified Public Accountants

STATEMENT OF FINANCIAL CONDITION

December 24, 1956

ASSETS

CASH ON HAND AND IN BANKS	
Michigan National Bank	
Lansing, Michigan	\$21,013.69
Grand Rapids, Michigan	
(Treasurer's Account).....	8,713.01
Office Cash (Lansing and	
Detroit, Michigan)	86.61
	\$ 29,813.31

ACCOUNTS RECEIVABLE

Advertising, Allowances and Other Items.....	\$22,913.71
Collection Expense	15.50
Due from Employees—Insurance Premiums....	612.39
Employee Advances.....	562.65

\$24,104.25

LESS Allowance for Doubtful Accounts.....	126.30
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23,977.95

INVESTMENTS (Schedule 10)

(Market or Redemption Value—\$223,813.13)

229,795.25

JMSMS

REPORT OF KNOTSMAN & SMITH, CPA

PROPERTY AND EQUIPMENT

(Schedule 11)		
Land	\$10,000.00	
Office Building	\$34,500.00	
Lot Adjoining Office Building	6,000.00	
Building Improvements	5,664.06	
Building Equipment	3,836.09	
Parking Lot	1,913.60	
	<u>51,913.75</u>	
	\$61,913.75	
LESS Depreciation Allowance	8,634.55	53,279.20
OTHER ASSETS		
Prepaid Expenses		231.66
TOTAL ASSETS		<u>\$337,097.37</u>

LIABILITIES

ACCOUNTS PAYABLE		
Federal Unemployment Tax	\$ 206.42	
Michigan Unemployment Tax	48.35	
Unpaid Invoices	14,512.95	
Payroll Taxes—Payable	1,524.72	
	<u>\$ 16,292.44</u>	
DEFERRED INCOME		
1957 MCI Booth Sales	\$13,650.00	
1957 Membership Dues	2,160.00	
	<u>15,810.00</u>	
TOTAL LIABILITIES		<u>\$ 32,102.44</u>

SOCIETY EQUITIES

RESERVED FOR SPECIAL PURPOSES		
Public Education Reserve	\$57,245.00	
Public Education Program	73,891.87	
	<u>\$131,136.87</u>	
Public Service Account	3,675.16	
Professional Relations Account	4,897.50	
Rheumatic Fever Control Program	7,675.56	
Contingent Fund	53,614.34	
Building Fund	14,124.94	
TOTAL RESERVED	<u>\$215,124.37</u>	
General Society Equity		
12-24-55	77,593.98	
Net Gain for Period		
(Exhibit "B")	12,276.58	
	<u>89,870.56</u>	
TOTAL EQUITIES (Exhibit "C")		<u>\$304,994.93</u>
TOTAL LIABILITIES AND EQUITIES		<u>\$337,097.37</u>

STATEMENT OF INCOME AND EXPENSE

December 24, 1955, to December 24, 1956

INCOME		
Membership Dues	\$156,346.76	
Miscellaneous	1,456.35	
Interest Income (Schedule 10)	4,241.03	
Amortization (Schedule 10)	660.04	
	<u>\$162,704.18</u>	
OTHER INCOME		
Annual Session (Schedule 2)	(2,468.88)	
Michigan Clinical Institute		
(Schedule 3)	(73.38)	
"The Journal" (Schedule 4)	1,096.70	
	<u>(1,445.56)</u>	
TOTAL INCOME		<u>\$161,258.62</u>

EXPENSES

Administrative and General		
(Schedule 1)	\$85,160.42	
Society Activity (Schedule 1)	40,603.79	
Committee Expenses (Schedule 1)	23,217.83	
	<u>148,982.04</u>	
NET GAIN		<u>\$ 12,276.58</u>

EXPENSES

December 24, 1955, to December 24, 1956

ADMINISTRATIVE AND GENERAL

Printing, Mailing and Postage	\$13,464.35
Office Supplies	3,574.33
Insurance and Fidelity Bonds	4,813.05
Auditing	750.00
Salaries—Administrative and Office	34,157.58
General Counsel Retainer and Expense	6,856.53
Equipment and Repairs	2,145.16
Telephone and Telegraph	5,046.92
Payroll Taxes	1,963.15
Miscellaneous Expense	2,598.74
Employee's Retirement Trust	9,790.61

TOTAL ADMINISTRATIVE AND

GENERAL EXPENSES	<u>\$85,160.42</u>
SOCIETY ACTIVITIES	
Council Expense	\$15,599.98
Delegates and Alternates to AMA	7,011.68
General Society Travel and Entertainment	7,501.61
Officers' Travel	5,558.78
Secretary's Letters	1,273.43
Woman's Auxiliary	600.00
Dues Collection Expense	3,058.31

TOTAL SOCIETY ACTIVITIES

EXPENSES	<u>\$40,603.79</u>
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COMMITTEE EXPENSE

Legislative	\$ 1,020.08
Postgraduate Medical Education	2,712.09
Preventive Medicine	102.11
Cancer Co-ordinating Committee	1,000.00
Child Welfare	431.71
Geriatrics	244.86
Industrial Health	90.93
Maternal Health	570.39
Civil Defense	204.50
Mental Health	507.85
Scientific Radio	724.00
Veneral Disease	38.49
Tuberculosis Control	50.49
Michigan Health Council	10,000.00
Rural Medical Service	211.24
Highway Accident Committee	460.70
Beaumont Memorial Restoration (Note 1)	2,353.56
Permanent Conference Committee	31.27
Sundry Committee Expense	2,463.56

TOTAL COMMITTEE EXPENSES	<u>\$23,217.83</u>
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TOTAL EXPENSES (Exhibit "B")	<u>\$148,982.04</u>
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Note 1:

This item is the net expense, after deducting \$6,920.00 of contributions received.

INCOME AND EXPENSE SUMMARY

December 24, 1955, to December 24, 1956

	Balance 12-24-55	Income for the Period	Expenses for the Period	Net Gain or (Loss)	Balance 12-24-56
Equity—General Fund		\$162,704.18	\$148,982.04	\$13,722.14	
Annual Session		23,757.50	26,226.38	(2,468.88)	
Michigan Clinical Institute					
THE JOURNAL		13,360.00	13,433.38	(73.38)	
Contingent Fund	37,267.34	94,400.27	93,303.57	1,096.70	
Building Fund	13,788.46	16,347.00	10,898.00	16,347.00	53,614.34
Public Education Reserve	30,000.00	27,245.00	10,561.52	336.48	14,124.94
Public Education Program	76,494.02	34,217.21	36,819.36	27,245.00	57,245.00
Public Service	281.28	19,071.51	15,677.63	(2,602.15)	73,891.87
Professional Relations	6,805.30	28,607.23	30,515.03	3,393.88	3,675.16
Rheumatic Fever Control Program	22,704.24	10,000.00	25,028.68	(1,907.80)	4,897.50
				(15,028.68)	7,675.56
TOTAL	<u>\$264,934.62</u>	<u>\$440,607.90</u>	<u>\$400,547.59</u>	<u>\$40,060.31</u>	<u>\$304,994.93</u>

REPORT OF KNOTSMAN & SMITH, CPA

INCOME AND EXPENSE OF THE ANNUAL SESSION

December 24, 1955, to December 24, 1956

INCOME	
Booth Sales—(99 spaces).....	\$23,757.50
EXPENSES	
Scientific Meeting.....	4,199.77
Registration and Hotel Expense.....	985.14
Exhibit Expense.....	3,804.27
State Society and Officers Night.....	3,253.73
Promotion—Printing, Mailing, Postage and Scientific Work Committee.....	3,840.85
Press Expense.....	2,652.95
Salaries.....	4,999.92
House of Delegates.....	1,365.66
Miscellaneous and Travel.....	1,124.09
TOTAL EXPENSES	\$26,226.38
LOSS ON ANNUAL SESSION	\$(2,468.88)

INCOME AND EXPENSE OF THE MICHIGAN CLINICAL INSTITUTE

December 24, 1955, to December 24, 1956

INCOME	
Booth Sales—(75 spaces).....	\$13,360.00
EXPENSES	
Scientific Meeting.....	2,146.77
Registration and Hotel.....	768.33
Exhibit Expense.....	3,535.48
Promotion—Printing, Mailing, Postage and Committee Meetings.....	3,654.05
Press Expense.....	1,692.92
Salaries.....	1,399.92
Residents and Interns Conference.....	39.76
Miscellaneous.....	196.15
TOTAL EXPENSES	\$13,433.38
(LOSS) ON MCI	\$ (73.38)

"THE JOURNAL OF THE MICHIGAN STATE MEDICAL SOCIETY"

December 24, 1955, to December 24, 1956

INCOME	
Allocation from Dues.....	\$ 8,173.49
Subscriptions of Others.....	821.48
Advertising Sales.....	80,812.64
Reprint and Cut Sales.....	4,592.66
TOTAL INCOME	\$94,400.27
EXPENSES	
Editors Expense.....	\$ 3,000.00
Printing, Mailing and Postage.....	54,431.14
Reprint and Cut.....	3,508.22
Salaries.....	12,699.96
Discounts and Commissions.....	19,551.75
Miscellaneous.....	112.50
TOTAL EXPENSES	\$93,303.57
GAIN ON THE JOURNAL	\$ 1,096.70

INCOME AND EXPENSE OF THE BUILDING MAINTENANCE FUND

December 24, 1955, to December 24, 1956

INCOME	
Allocation from 1956 Dues.....	\$10,898.00
EXPENSES	
Maintenance—Utilities, Decorating, Supplies, Yard Work, etc.....	2,789.71
Janitor—Salary.....	1,814.99
Taxes, Property.....	815.65
Insurance.....	541.88
Depreciation.....	1,756.79
Reception Room Furnishings.....	111.72
Parking Area.....	658.48
Remodeling.....	2,072.30
TOTAL EXPENSES	\$10,561.52
GAIN ON BUILDING MAINTENANCE FUND	\$ 336.48

INCOME AND EXPENSE OF THE PUBLIC EDUCATION PROGRAM

December 24, 1955, to December 24, 1956

INCOME	
Allocation from Dues.....	\$34,056.26
Miscellaneous (Commissions).....	160.95
TOTAL INCOME (Note 1)	\$34,217.21
EXPENSES	
Committee Meetings.....	149.11
Equipment and Repairs.....	1,442.74
Printing, Mailing and Postage.....	3,796.46
Office Supplies.....	969.81
Salaries.....	14,554.50
Telephone and Telegraph.....	1,367.50
Travel and Entertainment.....	6,410.41
Publications, Pamphlets and Clippings.....	2,279.32
Radio, Television and Cinema.....	3,632.08
Miscellaneous.....	595.65
Exhibit Expense.....	1,621.78
TOTAL EXPENSES	\$36,819.36
LOSS DURING PERIOD	\$(2,602.15)

Note 1

This does not include \$27,245 allocation of dues specifically set aside for the Public Education Reserve.

INCOME AND EXPENSE OF THE PUBLIC SERVICE ACCOUNT

December 24, 1955, to December 24, 1956

INCOME	
Allocation from Dues.....	\$19,071.51
EXPENSES	
Salaries.....	\$12,285.10
Telephone and Telegraph.....	171.75
Rural Health Conference.....	258.72
Travel and Entertainment.....	2,962.06
TOTAL EXPENSES	\$15,677.63
GAIN DURING PERIOD	\$ 3,393.88

INCOME AND EXPENSE OF THE RHEUMATIC FEVER CONTROL PROGRAM

December 24, 1955, to December 24, 1956

INCOME	
Grant from Michigan Heart Association.....	\$10,000.00
EXPENSES (Central Office)	
Committee meetings.....	244.14
Equipment and Repairs.....	.....
Payroll Taxes.....	332.90
Printing, Mailing and Postage.....	1,826.02
Office Supplies.....	.....
Publications and Pamphlets (Purchased).....	.....
Salaries—Administrative and Office.....	11,600.07
Travel.....	900.30
Fellowships.....	2,875.00
Laboratory Aid Plan.....	.....
Telephone and Telegraph.....	.....
TOTAL CENTRAL OFFICE EXPENSES	\$17,778.43

CONTROL CENTERS

Alpena.....	\$ 200.00
Ann Arbor.....	357.50
Bay City.....	780.00
Benton Harbor.....	165.00
Detroit.....	500.00
Grand Rapids and Muskegon.....	3,200.00
Jackson.....	.....
Kalamazoo.....	1,142.75
Lansing.....	.....
Petosky.....	.....
Pontiac and Royal Oak.....	37.00
Saginaw.....	.....
Sault Ste. Marie.....	.....
Traverse City.....	868.00

TOTAL CONTROL CENTERS	\$ 7,250.25
TOTAL EXPENSES	\$25,028.68
LOSS DURING PERIOD	\$(15,028.68)

INCOME AND EXPENSE OF THE PROFESSIONAL RELATIONS ACCOUNT

December 24, 1955, to December 24, 1956

INCOME	
Allocation from Dues.....	\$28,607.23
EXPENSES	
Rent to Wayne County Medical Society.....	\$ 480.00
Salaries	14,824.59
Telephone and Telegraph.....	764.22
Travel and Entertainment.....	5,710.87
National Meeting Expense.....	1,263.47
Public Relations—County Secretaries' Conference.....	6,225.04
County Society and Field Secretaries' Meetings.....	306.68
Woman's Auxiliary.....	940.16
TOTAL EXPENSES	\$30,515.03
LOSS DURING PERIOD	\$(1,907.80)

MSMS ANNUAL MEETING

September 25-26-27, 1957

Civic Auditorium, Pantlind Hotel

Grand Rapids

→ Make your hotel reservation now. ←

SECURITIES OWNED

December 24, 1956

	Maturity Date	Face Value	Cost 12-24-55 (Book Value)	Redemption Prices 12-24-56	Purchases during Period	Amortization Debit or (Credit)	Cost 12-24-56 (Book Value)	Interest Paid on Purchase	Interest Received to Last Interest Date
UNITED STATES GOVERN-									
MENT SECURITIES									
Savings Bonds—Series "G"	5-1-58	\$ 5,000.00	\$ 5,000.00	\$ 4,910.00	\$	\$	\$ 5,000.00	\$	\$ 125.00
Savings Bonds—Series "G"	3-1-60	5,000.00	5,000.00	4,850.00			5,000.00		125.00
Treasury Bond—Series "B" 2¾%	4-1-80/75	8,000.00	8,169.58	8,000.00		(8.92)	8,160.66		220.00
Savings Bonds—Series "K" 2.76%	6-1-66	45,000.00	45,000.00	43,875.00			45,000.00		1,242.00
Savings Bonds—Series "K" 2.76%	7-1-66	4,000.00	4,000.00	3,880.00			4,000.00		110.40
Treasury Bond—2¼%	6-15-62/59	25,000.00		23,265.63	24,375.00	208.33	24,583.33	107.58	562.50
Treasury Bond—2½%	3-15-70/65	10,000.00	9,760.94	8,812.50		26.56	9,787.50		250.00
Treasury Bond—2½%	11-15-61	25,000.00		23,687.50	24,164.06	167.19	24,331.25	276.44	625.00
Treasury Bond—2½%	11-15-61	35,000.00		33,162.50	33,665.63	266.88	33,932.51	197.35	437.50
Time Certificate—Michigan National Bank, 2½%, Dated 3-16-55	Six months Notice Subject to Renewal	25,000.00	25,000.00	25,000.00			25,000.00		
Time Certificate—Michigan National Bank, 2½%, Dated 3-18-55	Six months Notice Subject to Renewal	15,000.00	15,000.00	15,000.00			15,000.00		375.00
BONDS HELD FOR PUBLIC									
EDUCATION PROGRAM									
Savings Bonds—Series "G"	8-1-58	30,000.00	30,000.00	29,370.00			30,000.00		750.00
		<u>\$232,000.00</u>	<u>\$146,930.52</u>	<u>\$223,813.13</u>	<u>\$82,204.69</u>	<u>\$660.04</u>	<u>\$229,795.25</u>	<u>\$581.37</u>	<u>\$4,822.40</u>

PROPERTY AND DEPRECIATION ALLOWANCE

December 24, 1956

	Date Acquired	Cost	Depreciation Allowance Prior Years	Estimated Life (Years)	Depreciation Expense 1956	Depreciation Allowance 12-24-56
Land	1951	\$10,000.00	\$		\$	\$
Building	1951	34,500.00	5,050.00	30	1,150.00	6,200.00
		44,500.00	5,050.00		1,150.00	6,200.00
BUILDING IMPROVEMENTS						
New Building Entrance	1953	3,917.85	326.50	30	130.60	457.10
Remodel Basement and Storeroom	1956	1,746.21		30 (6 mos.)	29.10	29.10
		<u>\$ 5,664.06</u>	<u>\$ 326.50</u>		<u>\$ 159.70</u>	<u>\$ 486.20</u>
BUILDING EQUIPMENT						
Lighting	1952	\$ 2,121.50	\$ 565.72	15	\$ 141.43	\$ 707.15
Boiler	1952	1,714.59	457.14	15	114.30	571.44
		3,836.09	1,022.86		255.73	1,278.59
PARKING LOT	1953	1,913.60	478.40	10	191.36	669.76
LOT ADJOINING OFFICE BUILDING	1952	6,000.00				
		<u>\$61,913.75</u>	<u>\$6,877.76</u>		<u>\$1,756.79</u>	<u>\$8,634.55</u>

This is part of the report of The Council MSMS. See pages 364-376 in the March, 1957 number.

MAY, 1957

Michigan Foundation for Medical and Health Education

PRESIDENT'S ANNUAL REPORT

BY EARL INGRAM CARR, M.D.

Lansing, Michigan

Some added satisfaction can be conveyed by this twelfth annual report to the Members and Trustees of the Michigan Foundation for Medical and Health Education, Inc. Monetary advancement has occurred as will be indicated here and by later reports.

The Trustees are most happy to announce acceptance of appointment to the board by Mr. Howard C. Baldwin to fill the vacancy left by the death of our valued Trustee, Mr. C. Stewart Baxter. Mr. Baldwin is a distinguished lawyer, Trustee of the Kresge Foundation and director of various corporations and financial institutions. You will remember the part he played in the magnificent contribution of the Medical Research and Library Structure to the University of Michigan by the Kresge Foundation. Many of us attended the impressive ceremonies at the dedication.

The various activities and sponsorships, from year to year enumerated and reported, have been assumed through 1956. The business of the corporation has been faithfully conducted throughout the year and the officers and committees responded to needs and requests as they arose.

In THE JOURNAL OF THE MICHIGAN STATE MEDICAL SOCIETY entitled "As the Physician Serves His Patient, So His Society Serves the Public," the story of the Foundation is told on pages 1326 and 1327 under the title "Organized Aid to Medical and Health Education." Reprints of this article are available at the secretary's office.

The Michigan Foundation Annual Lecture was delivered at the Clinical Institute in Detroit on March 7, 1956, by Doctor Alton Oschner of New Orleans on the subject of "What's New in Lung Cancer." The Biddle Annual Lecture was delivered in September by Lawrence A. Hafstad, Ph.D., of General Motors Corporation. His subject was "The Future of Atomic Energy and Medicine." Both lectures are financial responsibilities of the Foundation.

Processed, granted and advanced loans under the Revolving Fund Plan have aggregated to date \$15,263.00 to nine individuals. One loan in 1951 and a second loan to another student in 1953 have already been repaid in full making a return of \$3,100.00. In another instance \$1,500.00 remains not yet advanced. The outstanding loans at the moment rest at \$10,663.12.

The Rural Health Conference for 1956 was held last week on January 16, 17, and 18, at the Kellogg Center on the campus of Michigan State University. This three-day affair was generally regarded as one of the most successful with an attendance of at least 300. 168 attended the banquet and 24 presidents of various Michigan health organizations were present. Over 40 speakers and resource people participated. The program was divided by days, the first, Professional Day, the second, Rural Health Day, and the third, Community Health Day. The Michigan Foundation was credited as being the financial sponsor and there were 104 listed co-sponsors.

Gifts during 1956 exceeded \$11,000.00. \$2,313.12 was drawn upon the allocated \$6,000.00 for the Student Loan Fund by the Ingham County Medical Society. The balance of this allocation earned \$72.19 in interest making the total balance \$3,759.07 to be utilized under the terms of the gift. Setting an example for other county medical societies, the Barry County Medical Society donated and delivered \$5,000.00 this year. They stipulate that it be used for residents of their county who need supplemental financial aid as medical students under the Foundation Student Aid Revolving Fund Plan. No applicants under this gift have yet appeared. Appreciation of this generosity has been expressed by the trustees by special communication and by editorial in THE JOURNAL of the State Society. Contributions of \$1,000.00 each have been received from the Women's Auxiliary of the Wayne County Medical Society and from the estate of the late Henry A. Luce, M.D. Other contributions under the LeFevre Birthday Plan and otherwise, aggregate for the year \$2,360.00. Our investment portfolio yielded for the year \$3,543.84 in interest and dividends.

The auditors show total reserves of \$127,332.90 besides redemption value increase of \$5,431.11 and the balance of allocation by Ingham County Medical Society of \$3,759.07 makes a total of \$136,523.08 as a net worth of the Foundation on the audit date.

Increase of diversity and number of activities by the Foundation depends upon money. General acceptance of the LeFevre Birthday Plan would make regular annual income. Remember the Foundation on your birthday, just before or just after your health audit.

January 23, 1957.

REPORT OF THE SECRETARY

BY WM. J. BURNS, LL.B.

Lansing, Michigan

The Secretary has executed the duties of his office according to the By-Laws and as provided in Roberts Rules of Order, pursuant to the instructions of the

Board of Trustees and with the helpful guidance of President Carr.

On January 24, 1956, the Woman's Auxiliary to the

Wayne County Medical Society contributed \$1,000.00 to the Student Loan Revolving Fund, with certain specifications attached to the gift which were noted by the Foundation's Board of Trustees, January 25, 1956.

On February 4, 1956, the late Henry A. Luce, M.D., devised \$1,000.00 to the Foundation, the gift containing a special earmarking purpose: for research into physical causes of mental illness.

On November 1, 1956, the Barry County Medical Society contributed \$5,000.00 to the Foundation, earmarked for purpose of loans to medical students, residents of Barry County.

The Michigan Foundation for Medical and Health Education Lecture, to be given at the 1957 Michigan Clinical Institute—with the speakers' expenses to be paid out of the Biddle Fund to the Foundation—will be presented March 13 by Charles B. Huggins, M.D., of Chicago who will speak on the "Control of Human Cancers by Endocrinologic Methods."

The Student Loan Fund has been utilized to aid the medical education of the following medical students:

Robert E. Pearson.....	Wayne State University
Robert O. Webster.....	University of Michigan
Al Edmond Eary, Jr.....	University of Michigan
Benjamin J. Koepke.....	Wayne State University
Donald P. Jackson.....	Wayne State University
John C. Shelton.....	University of Michigan
Russell F. Smith.....	University of Michigan
Paul C. Linnell.....	University of Michigan
Richard Morin.....	University of Michigan

January 23, 1957

CHRONIC DISEASE—A CHALLENGE TO THE MEDICAL PROFESSION

(Continued from Page 618)

each specialist working more or less independently needs objective scrutiny—and such modification as may be necessary.

Conclusion

A number of hardy pioneers have already attacked the medical frontier of chronic disease. Each day brings further progress. All segments of American medicine are called upon to push forward in developing new scientific knowledge and to fully utilize existing knowledge in meeting today's chronic disease problems. Many of these can be prevented. The effect of others can be minimized, or the condition arrested.

In moving toward these goals, it would profit

us well, I think, to consider Dr. Franklin Murphy's⁴ good advice. He reminds us that:

"These problems have many facets, scientific, economic, and social, and will tax our greatest combined efforts. They will require imagination and objectivity for their solution. New paths must be blazed (as indeed is the case in many other aspects of our culture today). Their effective resolution will be hastened as we blend public and private effort on the basis of logic and need."

References

1. Hess, Elmer, M.D.: Address of president before the house of delegates at the annual meeting of the American Medical Association in Chicago, Illinois, June 11, 1956. J.A.M.A., 161:734-738 (June 23) 1956.
2. Homburger, F.: The medical care of the aged and chronically ill. Boston: Little, Brown and Company, 1955.
3. Kurlander, A. B.: Preventive aspects of chronic disease. J. Nat. M. A., 48: March, 1956.
4. Murphy, F. D.: Health—Public or Private? Am. J. Pub. Health, 46:15-18 (January) 1956.

CHRONIC DISEASE—A CHALLENGE TO PUBLIC HEALTH

(Continued from Page 622)

Conclusion

Many health departments have not yet faced up to their unmistakable responsibility or concentrated their full potential in the chronic disease field. In public health, as in any other important activity, we must address our efforts to problems as they are—not as we should like to see them. This leaves us no choice. The chronic illness problem is of such magnitude and complexity that no one group, no one profession can hope to solve it alone. We must assure a co-ordinated effort of the necessary groups and disciplines if we are to achieve success.

The ideal response to this challenge has been described as "unity of services." Preventive, curative, and restorative programs—both public and private—must be combined to accomplish that "unity."

We have, as a nation, concentrated our resources in a commendable fashion on the problems of youth and youth's environment. The job ahead in the health field is to effect a comparable concentration on the problems that generally manifest themselves in adult life.

Michigan's Department of Health

Albert E. Heustis, M.D., Commissioner

NEW BIRTH, DEATH RECORDS SET

Provisional vital statistics for 1956, compiled in the state health department, show six new records set in Michigan.

The state's birth rate reached an all-time high of 27.4, slightly over the previous record rate of 27.3 established in 1954. Births totaled 205,650, exceeding the 200,000 mark for the first time in the state's history. The 100,000 mark was passed in 1941.

The death rate of 8.5 in 1956 was an all-time low, though only a slight gain over the 8.6 of 1954.

The vital index, the birth-death ratio, reached 320 in 1956. The previous high was 316, recorded in 1954.

The infant death rate stood at 24.6, an all-time low. This was a slight gain over the 24.8 recorded in 1955 but still high for a state like Michigan.

The state's population totaled 7,516,000 in 1956, a gain of 1,144,234, or 18 per cent over the 1950 figure. This makes Michigan the fastest growing state in the Midwest.

Provisional 1956 figures for the United States include: birth rate, 29.9; death rate, 9.4; vital index, 266; and infant death rate, 26.1.

NEW HOSPITAL MANUAL IN PREPARATION

First draft of a manual to be used as a companion to the Michigan Department of Health publication, "Rules and Minimum Standards for Hospitals," has recently been completed by staff members. It is designed to clarify some of the rules and to suggest acceptable procedures for patient care, especially in the maternity department.

The preliminary draft of the manual is being reviewed by a number of physicians, nurses and hospital administrators and the detailed and thoughtful suggestions that are coming to the Commissioner from this busy group are greatly appreciated. It is the same type of helpful advice that was given the department when it was developing rules and standards after being given responsibility in hospital licensing in 1951.

It will be several months before the manual is ready for distribution.

OCCUPATIONAL HEALTH ENGINEERS AID INVESTIGATION

Department occupational health engineers, working with plant engineers and representatives of management and labor, took an active part in investigating the recent paint solvent explosion in the frame painting building of an automobile manufacturing plant. In the explosion, some twenty-two workmen were injured and four have died.

Immediate plans for rebuilding the frame painting area were drawn up by plant engineers. These plans

were discussed in detail at several conferences and new safety features proposed were examined thoroughly by department engineers. As one checking procedure a pilot production run was made to determine whether design specifications were being met. On the basis of results, additional improvements were suggested and put into effect.

At a meeting between department and plant engineers, state and municipal officials and company and union representatives, results were reviewed and additional investigative procedures outlined.

At a final meeting, department engineers reported that it was their opinion that the company had installed a greatly improved system so far as safety was concerned and that within the limits of the present method of frame painting, everything within reason and good practice had been installed. It was emphasized that there is no industrial painting operation of a similar nature that is 100 per cent explosion proof and that this makes of first importance the installation and maintenance of measures and precautions that prevent injury to the workers in the event of an explosion.

DEPARTMENT MOVES INTO NEW ADDITION

The division of engineering and two sections of the division of disease control, records and statistics are now occupying their new quarters in the department's recently completed addition. The new two-story building adjoins the Administration Building on the south.

BABY SITTER HANDBOOK AVAILABLE

A recent publication that is much in demand from the department is a 30-page booklet entitled "Baby Sitting." The material was prepared by a sub-committee of the Interdepartmental Staff on Children and Youth. The booklet emphasizes the responsibilities of the sitter to the family and the family to the sitter, discussing safety precautions, understanding the behavior and needs of children at different age levels, and ways to help children to play happily. The content is sufficiently detailed to serve the needs of the many courses that are now being given in junior and senior high schools for the training of boys and girls in baby sitting.

Copies of the booklet are available upon request.

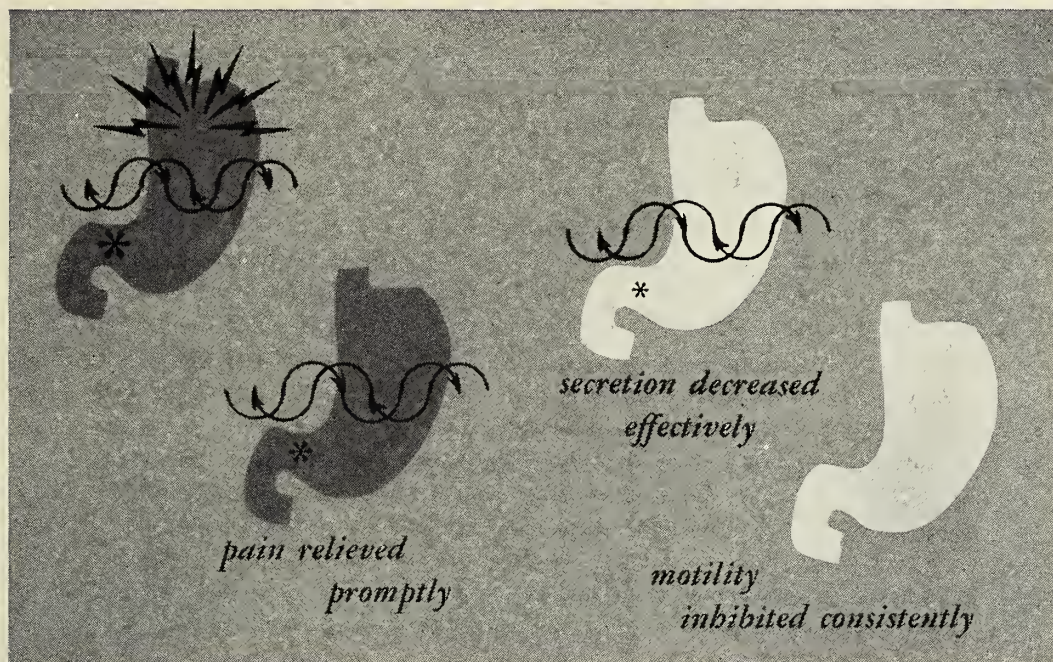
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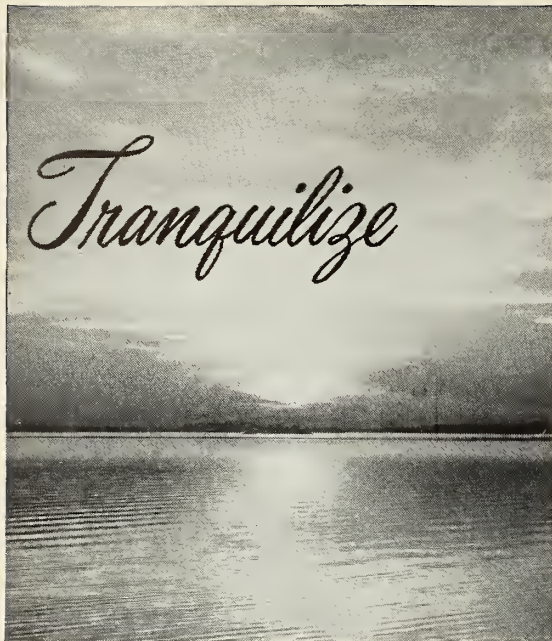
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*Lichstein, J.; Morehouse, M. G., and Osmon, K. L.: Pro-Banthine in the Treatment of Peptic Ulcer. A Clinical Evaluation with Gastric Secretory, Motility and Gastroscopic Studies. Report of 60 cases, Am. J. M. Sc. 232:156 (Aug.) 1956.

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In Memoriam

Eugene V. Gourley, M.D., forty-four, Detroit practitioner for eleven years and staff physician at Mt. Carmel Mercy Hospital. Born in Mexico, he was a graduate of the University of Detroit and Wayne State University College of Medicine, and had interned at Grace Hospital. Dr. Gourley served in the Army Medical Corps during World War II, attaining the rank of lieutenant colonel. He was a member of the Wayne County Medical Society. He died suddenly in his office March 8, 1957, of a heart attack.

* * *

James W. MacMeekin, M.D., forty-nine, prominent Saginaw surgeon and chief of staff of Saginaw General Hospital. A native of Saginaw and son of a Saginaw doctor, he graduated from the University of Michigan Medical School. During World War II he served as a Navy doctor with the rank of lieutenant commander. Doctor MacMeekin was an amateur pilot of about 15 years' experience. He was a member of the Saginaw County Medical Society. He died March 16, 1957, when his private plane crashed.

* * *

Sylvester J. O'Connor, M.D., thirty-nine, Ann Arbor surgeon and Associate Professor of Surgery at the University of Michigan Medical School. Born in Burbank, South Dakota, he received his Bachelor of Science degree from Trinity College, Sioux City, Iowa, and was graduated from the University of Michigan Medical School in 1942. During World War II, he was associated with the Army Medical Corps, stationed at University Hospital. He was a member of the Washtenaw County Medical Society. He died suddenly March 10, 1957.

* * *

David H. O'Donnell, M.D., eighty-seven, Detroit practitioner for sixty-six years and physician to many prominent Detroit families. Born in Wardsville, Ontario, he graduated from the Detroit College of Medicine in 1891. During his career, Doctor O'Donnell delivered more than 7,000 babies, among them the late Edsel B. Ford. Organizer of Providence Hospital in 1908, he later was chief of staff of the hospital for thirteen years. He was also medical director of St. Joseph's Retreat, Dearborn, for thirty years. He was a member of the Wayne County Medical Society and an Emeritus Member of the Michigan State Medical Society. He died March 18, 1957.

* * *

Frederick W. Palmer, M.D., fifty, superintendent of the Mt. Pleasant State Home and Training School since 1949. Born in Yale, Michigan, he received his M.D. degree from the University of Michigan. He was a member of the Gratiot-Isabelle-Clare County Medical Society. He died suddenly March 23, 1957.

* * *

Melvin D. Roberts, M.D., seventy-seven, Hancock general practitioner for fifty-three years. Born in Char-

(Continued on Page 644)



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Melvin D. Roberts, M.D.

(Continued from Page 642)

lotte, Michigan, he graduated from the University of
Michigan Department of Medicine and Surgery in 1903.
He did military service in both World War I and
World War II, retiring to civilian life in 1945 with
the rank of Commander. He was a member of the
Houghton-Baraga-Keweenaw County Medical Society
and a Life Member of the Michigan State Medical
Society. He died March 8, 1957, after a long illness.

* * *

George W. Robinson, seventy-nine, Detroit obstetrician
for fifty years. Born in Bradford, Ontario, he was
graduated from the Detroit College of Medicine in
1905. He had been a consultant staff member at Detroit
Memorial Hospital before his retirement in 1948. He
was a member of the Wayne County Medical Society,
and a Life Member of the Michigan State Medical
Society. He died March 10, 1957.

* * *

Joseph Burgess Whinery, M.D., ninety, of Winter
Park, Florida, former Grand Rapids practitioner for
fifty-seven years and father of State Representative
Thomas J. Whinery. Born in Wilmington, Ohio, he
graduated from the University of Michigan Medical
School in 1892. During World War I, he served as a
major in the Army Medical Corps. He was a member
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Member of the Michigan State Medical Society. He
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NEWS MEDICAL

MICHIGAN AUTHORS

M. K. Newman, M.D., Detroit, is the author of an article, entitled "Diagnosis, Management, and Problems of Muscular Dystrophy," published in the Detroit District of the *Michigan State Nurses Association Journal*, March, 1957.

Charles S. Stevenson, M.D., Harold A. Ott, M.D., Palmer E. Sutton, M.D., and Mary Lou Bard, M.D., Detroit, are the authors of an article, entitled "Maternal Deaths from Obstetric Anesthesia and Analgesia: Can They Be Eliminated?" published in *Obstetrics and Gynecology* and condensed in *American Practitioner and Digest of Treatment*, February, 1957.

Carl T. Javert, M.D., New York, is the author of an article, entitled "Program of Therapy for Repeated Abortion Patients," published in *THE JOURNAL of the Michigan State Medical Society*, July, 1955, and condensed in the *American Practitioner and Digest of Treatment*, February, 1957.

Leon S. McGoogan, M.D., Omaha, is the author of an article, entitled "Endometriosis," published in *THE JOURNAL of the Michigan State Medical Society*, July, 1955, and condensed in *American Practitioner and Digest of Treatment*, February, 1957.

Robert E. L. Berry, M.D., F.A.C.S., and William Rottschaefer, M.D., Ann Arbor, are the authors of an article, entitled "The Lymphatic Spread of Cancer of the Stomach Observed in Operative Specimens Removed by Radical Surgery Including Total Pancreatectomy," published in the *Journal of Surgery, Gynecology and Obstetrics*, March, 1957.

Seward E. Miller, M.D., Ann Arbor, is the author of an article, entitled "Medical Aspects of Radiological Health," presented in part at the Ninth Health Conference for Business and Industry in Houston, September, 1956, and published in *Industrial Medicine and Surgery*, March, 1957.

Mathew Alpern, Ph.D., Ann Arbor, is the author of an article, entitled "The Position of the Eyes During Prism Vergence," published in *A.M.A. Archives of Ophthalmology*, March, 1957.

J. Reimer Wolter, M.D., Robert L. Goldsmith, M.D., Ann Arbor, and Roland L. Phillips, M.D., Eloise, are the authors of an article, entitled "Histopathology of the Star-Figure of the Macular Area in Diabetic and Angiopathic Retinopathy," published in *A.M.A. Archives of Ophthalmology*, March, 1957.

Irving Shapiro, M.D., Minneapolis, Clifford W. Gurney, M.D., and Arthur J. Solari, M.S., Ann Arbor, are the authors of an article, entitled "Radioiodine Content of Aqueous, Vitreous, and Lens," published in *A.M.A. Archives of Ophthalmology*, March, 1957.

Carl F. List, M.D., Grand Rapids, is the author of an article, entitled "Disturbances of Eye Movements as a Neurologic Problem," published in the *New England Journal of Medicine*, March 8, 1956, and reprinted in *Guildcraft*, February, 1957.

R. S. Knighton, M.D., and J. D. Fox, M.D., Detroit, are authors of an original article, "Diagnosis and Treatment of Eosinophilic Granuloma of Skull," which appeared in *JAMA* December 1, 1956, page 1294.

J. P. Ferguson, M.D., V. Z. Linn, M.D., J. A. Sheets, Jr., M.D., and M. M. Nickels, M.D., Traverse City, are authors of an original article, "Methylenedate (Ritalin) Hydrochloride Parenteral Solution," which appeared in *JAMA* of December 1, 1956, page 1303.

* * *

Three new employees have been added to the AMA headquarters staff in Chicago. Two of them—John Guy Miller of Louisville and Joseph Miller of Lexington, Kentucky—joined the staff of the Council on Medical Service on April 1. They will be members of what is commonly known at headquarters as a "research task force" which will be established to handle special projects for the Council's eight different committees. It is planned to have three or four members on this force, who will work on such specific assignments as Hill-Burton, the new disability program under Social Security, the relationship of private physicians to physicians in public health, and other projects.

John Guy Miller has been serving as field representative for the Kentucky State Medical Association since 1952; prior to that job, he served in a similar capacity with the Michigan State Medical Society.

* * *

Physical Medicine and Rehabilitation.—Highland View Hospital, Cleveland, Ohio, in affiliation with Western Reserve University, is offering a six-month post-graduate Course in Physical Medicine and Rehabilitation. The Course will be from July 1 to December 31, 1957. Its purpose is to provide didactic and applicatory training in the principles and practices of Physical Medicine and Rehabilitation, with particular emphasis on chronic illness. The course is designed primarily to enhance the proper practice of rehabilitation methods by allied specialists. Fellowships are available for this course from the Office of Vocational Rehabilitation, Department of Health, Education and Welfare. Application should be made to Highland View Hospital, Cleveland 22, Ohio.

(Continued on Page 648)

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(Continued from Page 646)

Harry M. Nelson, M.D., Detroit, Chairman of the Michigan Cancer Coordinating Committee, was guest speaker at the Cancer Forum sponsored by A. C. of S., Georgia Division, in Atlanta on March 15. Dr. Nelson's topic was "Value of Routine Vaginal Smears and Proctoscopies in Cancer Detection."

* * *

The Sixth Annual Symposium for General Practitioners on Tuberculosis and Other Chronic Pulmonary Diseases will be held at Saranac Lake, New York, July 8-12, 1957. For information on this Symposium, sponsored by the American Trudeau Society, et al., write Henry W. Leetch, M.D., General Chairman, P.O. Box 11, Saranac Lake, New York.

* * *

Fear: "A Doctor does not know from one day to the next whether or not he will be on the rounds at the hospital or under the boot of the political police in jail," comments Laszlo Kovasci, M.D., a Hungarian refugee in Ann Arbor. "Doctors can be fired in one minute on the charge of being 'against the state.' This usually happens whenever a qualified, reliable Communist Party member is available to replace him." Dr. Kovasci says that medicine has suffered greatly under Communist domination.

* * *

Undergraduate scholarships worth \$50,000 have been established by the Upjohn Company of Kalamazoo for the 1957-58 school year, including six for students who plan to major in pre-medicine, pharmacy, engineering, or any of the chemical or biological sciences. For information, write the Upjohn Company.

* * *

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Did you know that since 1950 our population has increased by 17,627,000—more than equivalent to the population of Canada? Our U. S. population by 1975 (less than twenty years from now) will increase to 220,800,000—an increase of 31.2 per cent.

* * *

Construction of a \$1,500,000 College of Nursing building at Wayne State University, Detroit, will begin in September, 1957, and will be ready for occupancy in early 1960.

* * *

Construction of a new Children's Hospital within the University of Michigan Medical Center will give Michigan its first complete children's center providing total care, including psychiatric, for the child, according to a University of Michigan release which indicated that the new 200-bed hospital will be constructed adjacent to the existing 75-bed Children's Psychiatric Unit opened in December, 1955.

Current information on tuberculosis indicates that there are somewhat less than 400,000 active tuberculosis cases in the United States at any one time, approximately one-third of which are hospitalized for tuberculosis, one-third are known cases at home, and one-third are undetected cases.—ROBERT J. ANDERSON, M.D., *Public Health Reports*, February, 1956.

* * *

Sidney Friedlaender, M.D., Detroit, Michigan, was one of the participants in the Panel discussions on "Present Concept of Therapy in Allergy with Cortisone and Allied Drugs" and "Drug Sensitivities," sponsored by the Honolulu County Medical Society, at Honolulu, Hawaii, on February 15, 1957.

* * *

Upper Peninsula Medical Society members and their wives will convene on June 21 and 22 at Houghton, in the heart of the Copper Country's beautiful vacation land. Committees have been appointed by T. P. Wickliffe, M.D., President of the Society, and plans are well under way to make this sixty-fourth session an outstanding success, both from the scientific and social standpoint.

The Copper Country offers some of the country's most beautiful scenery and a wide variety of vacation activities. Doctors of the Lower Peninsula are urged to mark the dates, and are cordially invited to attend the meeting and enjoy a vacation. Information may be secured by writing to Secretary F. W. Larson, M.D., Houghton.

The Seventh American Congress on Maternal Care (formerly known as the American Congress on Obstetrics and Gynecology) is scheduled for the Palmer House, Chicago, July 8-12, 1957. The five-day Congress will present topics dealing with the interprofessional approach to maternal and infant care. For information, write the American Committee on Maternal Welfare, 116 South Michigan Avenue, Chicago 3, Illinois.

* * *

The United States Atomic Energy Commission has announced the awarding of forty-eight unclassified life science research contracts in the fields of medicine, biology, biophysics, and radiation instrumentation, as part of the AEC's continuing policy of assisting and fostering research and development in the fields related to atomic energy. Among these awards is one to the University of Michigan for the "Clinical Evaluation of Teletherapy," the investigators being F. J. Hodges, M.D., and Isadore Lampe, M.D.

* * *

Home Town Care Program. On March 12, 1957, the Central Office of the Veterans Administration reversed its position in regard to the proposed cancellation of the Home Town Care Program for veterans utilizing such intermediaries as Blue Shield. The states involved in this problem were North Carolina, Wisconsin, South Dakota, Colorado, Oregon, Washington, California, the Territory of Hawaii and Michigan. Dr. William Bromme had been named as spokesman for the group. Mr. L. Gordon Goodrich was present,

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representing the intermediary used in Michigan.

It was agreed that the uniform contract developed by the representatives of these medical areas, which is, in effect, the program as it has operated in Michigan for over a decade, would be the standard uniform agreement for this type of program; and that the reporting forms as presently used in Michigan, would become the official reporting forms in this program. It was the opinion of those present that when the Veterans Administration initiates the long term program these same forms might be easily adapted for the purposes of the new program. Certain items of administrative expense, which in the past have been borne by the intermediary, such as Michigan State Medical Service, would now be taken care of by Veterans Administration. An example of this is the printing and distribution of the forms involved, the cost of which the Veterans Administration is assuming. *Detroit Medical News*, March 25, 1957.

* * *

University of Michigan Regional Conference on Hypertension will take place in Ann Arbor, Michigan, June 7-8, 1957, in recognition of twenty-fifth anniversary of the first production of Experimental Renal Hypertension by Dr. Harry Goldblatt. Reports will be presented on the Basic Mechanisms of Renal Hypertension, including adrenal, neurogenic and renoprival aspects. Overseas participants will include, among others, Dr. Eduardo Braun-Menendez from Argentina, and Drs. Goldblatt, Helmer, Wakerlin, Skeggs, Kohlstaedt, Page, Kejdi and McCubbin from the Michigan regional area. Those desiring to attend are urged to write well in advance for information and reservations to Dr. John Sheldon, Director, Department of Postgraduate Medicine, University of Michigan Medical School, University Hospital, Ann Arbor, Michigan.

* * *

Malaria Control.—The solution of the international public health problem of highest priority in the Americas was advanced one step forward by a special contribution of \$1,500,000, made by the United States Government to increase the special fund of the Pan American Sanitary Organization for malaria eradication.

Each year, some 250,000,000 persons are afflicted with this disease throughout the world, approximately 2,500,000 dying of it annually. Here in the Americas there are still extensive malarious areas and there are only a few countries where it is non-existent or has been eradicated. Malaria has been eradicated from the United States, for instance, in only the past three years.

* * *

Civil Aeronautics.—A new order makes medical certification of private pilots a more exclusive procedure. Until now, any physician, even at times a chiropractor could give the examinations. The new rule requires that examinations be given only by Civil Aeronautics Administration designated examiners, of whom there are 1,800 in the land. There has been some delay, but the rule should be in effect when this appears.

A new bill in the House of Representatives would authorize Walter Reed Army Institute of Research to award Master's and Doctor's degrees, but it is being delayed because of objection that the government should leave awarding of degrees to the authorized educational institutions.

* * *

The National Fund for Medical Education, being a federally Congressional organization, makes a yearly financial report. Grants to medical schools in 1956 totaled \$3,066,079, compared with \$2,657,434 in 1955. Administrative expenses were \$469,412, of which \$230,079 covered salaries.

* * *

The Hill-Burton hospital program is now in its eleventh year. To date, 3,332 projects have been approved, at a total estimated cost of \$2,712,512,871, with 754 under construction. The total is 146,947 hospital beds and 818 health centers.

* * *

M. K. Newman, M.D., Detroit, spoke before the Factfinders Club, Tuller Hotel, February 26, 1957, on "The Total Concept of Rehabilitation." For the Staff of Physical Medicine and Rehabilitation, University of Michigan, he presented a talk, entitled "Practical Aspects of Physical Medicine and Rehabilitation." On March 8, he presented a paper at the annual meeting of the Greater New York Chapter of the American Physical Therapy Association at the New York Coli-

seum. His subject was "Physical Medicine and Rehabilitation in Geriatrics." On March 22, he gave a medical talk to the staff of physical medicine and rehabilitation at the University of Illinois College of Medicine, entitled "Rehabilitation Techniques in the Management of Muscular Atrophy."

* * *

Lewis Cohen, M.D., presented a paper entitled "Electrovasography in the Study of Peripheral Vascular Dynamics" at the National Biophysics Conference in Columbus, Ohio, on March 5, 1957.

* * *

The American College of Surgeons held a Sectional Meeting at the Royal York Hotel, Toronto, Ontario, on March 25, 26, and 27, 1957. Michigan men participating in the program were Laurence S. Fallis, M.D., F.A.C.S., and Conrad R. Lam, M.D., F.A.C.S., Detroit; Richard H. Meade, M.D., F.A.C.S., Grand Rapids; F. Bruce Fralick, M.D., F.A.C.S., Ann Arbor; Reed M. Nesbit, M.D., F.A.C.S., Ann Arbor; D. Emerick Szilagyi, M.D., F.A.C.S., Detroit. Serving on the Board of Regents are Reed M. Nesbit, M.D., Ann Arbor, and Grover Penberthy, M.D., Detroit. Frederick A. Collier, M.D., Ann Arbor, serves on the Advisory Council.

* * *

Auto Makers Urged to Work for Safety.—Manufacturers are the only ones who can incorporate safety measures into autos, and if they don't do so Congress should act to force them. This in essence was the



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1. Pollock, B. E., and Pruitt, F. W.: *Am. J. M. Sc.*, 226:172, 1953.

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testimony of a representative of the Michigan State Medical Society, appearing before the special safety subcommittee of the House Interstate and Foreign Commerce Committee. John D. Rogers, M.D., Bellaire, the Michigan witness, also cited a recommendation of the A.M.A. House of Delegates, adopted December, 1955, which urged Congress to authorize a national body to approve and regulate auto safety standards.—*AMA Washington Letter*, March 29, 1957.

* * *



General hospital admission x-rays in Michigan led to the discovery of 500 previously unknown active cases of tuberculosis in 1955, the latest year for which figures are available.

Not quite half of the admissions for the fifty-five general hospitals reporting routine chest x-ray programs were screened. Less than one-third of all general hospital admissions were x-rayed in Michigan.

The 1955 record suggests that there may be 1,000 or more unsuspected active cases of tuberculosis among the unscreened portion of hospital admissions.

MICHIGAN TUBERCULOSIS ASSOCIATION

* * *

Wayne State University's Board of Governors, at a recent monthly meeting, reviewed gifts and grants totaling \$85,850 accepted by the University.

Major grants went to the instructional and research programs of the College of Medicine, including \$42,286 from the National Fund for Medical Education and the American Medical Education Foundation.

Scholarship and fellowship contributions totaled \$5,902. The Ford Motor Company gave \$5,000 and Burroughs Foundation \$1,500 to the Materials Management Center.

* * *

Army hospitals in this country and overseas will welcome 164 graduates from seventy-one approved medical schools as interns for the year beginning July 1. The interns represent all sections of the United States and were selected by the Army Medical Service in participation with the sixth National Intern Matching Program. This is the largest number of medical interns to be admitted at one time by the Army Medical Service. Reflecting the national trend towards earlier marriage and larger families, 73 per cent (121) of the interns are married. Of this group, over half have children: thirty-three having one child, twenty-one having two children, four having three children and two having four children. The remaining sixty married interns have none.

* * *

Columbia University has announced the establishment of two postgraduate-level, correspondence-type courses for hospital executives in eastern Hospital Assemblies. The courses will focus on the problems of small and medium-sized hospitals and will aim at giving

JMSMS

people active in the field an opportunity for systematic study of hospital organization and management. Funds for the program will be supplied by the Kellogg Foundation. Harold Baumgarten, Jr., former manager of Hospital Relations of the Blue Cross Commission, has been appointed program director.—*Hospitals*, February, 1957.

* * *

Erythropoetin.—University of Chicago medical scientists reported March 23, 1957, that they have established the mechanism and site of production of a new hormone which controls red blood cell formation. The hormone is produced in response to the changing balance between the oxygen demand and supply of the body. The process is analogous to the mechanism by which the level of blood sugar regulates the production of insulin. Leon C. Jacobson, M.D., and three of his research team made the announcement. The hormone, erythropoetin, is produced by the kidneys and is found in normal blood of human beings and animals. It stimulates the bone marrow to make the red cells. Though it has not yet been chemically isolated, it has been concentrated in blood serum by 100 to 1000 times its normal amount.

* * *

Social Security Extensions.—Health, Education, and Welfare reports show that more than one-half of the country's clergymen have exercised their option and are covered by social security. The deadline was April 15, 1957.

Members of Congress are still receiving letters and

petitions from individuals and groups requesting Social Security for M.D.s.

* * *

Medical Budgets.—Congressional hearings just published on the HEW Department's budget, covering 1602 pages, gives the administration's views of health insurance; research in the 100-bed clinical center at Bethesda, Md.; comments on medical school subsidization, Indian care, and U. S. Public Health Service. It is an encyclopedia.

* * *

Hoxsey Counter-attack.—Much attention was given at the hearing to the Hoxsey Cancer Clinic's counter-offensive against FDA. Since the latter had posters warning the public against Hoxsey treatment placed in 46,000 post offices and substations, the Texas promoter came back with a petition write-in campaign calling for Congressional investigation of FDA. Larrick attributed the campaign to Gerald B. Winrod, of Wichita, Kansas, as "a paid propagandist for Harry M. Hoxsey."

On Friday evening, March 15, 1957, while driving home, the Editor heard a radio program "Sound Off," on which several persons asked whether anyone could give the address of the Hoxsey cancer treatment. There were at least half a dozen answers.

* * *

Plans for construction of a two-story addition to the Henry Ford Hospital have been announced by Benson Ford, President of the Board. The contract is signed

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and construction will begin immediately. The addition will be atop the present front of the building and will become the fifth and sixth floors of the main building. There will be about 100,000 square feet of floor space and about 150 beds, raising the hospital's capacity to 950.

The original Ford Hospital was started in 1913, and was opened to the public in 1915. The present front was opened in 1920-1921, and the new clinic building in February, 1955.

* * *

Social Security Deadline Extended.—Ranking members of the House of Representative Ways and Means Committee are sponsoring a bill (H.R. 6191) to extend for one year the deadline for disabled workers to apply for determination of disability preliminary to "freezing" of their benefit rights, now June 30, 1957. HEW believes this will make an additional 165,000 workers eligible.

* * *

Hospitalization for the Aged.—There has been much consideration of hospitalization for the aged for quite some time, but the AFL-CIO Executive Council has announced its support, and the measure is again re-activated. The plan started in 1951 under our old acquaintance, Oscar Ewing, and has been reintroduced each term. The program is the same, to give up to sixty days of each year of hospitalization for persons over sixty-five on OASI. The government would pay the

costs out of the Old Age and Survivors Trust Fund. The worker's dependents over sixty-five would also be eligible.

* * *

Army Medical Officers.—Elsewhere in this issue the assignment of 160 new medical interns and residents to army hospitals is reported. Occasionally announcements of opportunities for younger men to apply for Army Service have also been published. There are about five applications for each vacancy. We have always been of the opinion high ranking officers were few in the Army Medical Corps, but upon inquiry find there are eleven Major Generals, and twenty-one Brigadier Generals. There have never been any Lieutenant Generals, and we believe there should be—at least to carry an equal rank with many installations. The Senate, on March 25, 1957, approved three new Brigadier Generals.

* * *

The total membership in Blue Cross Plans as of December 31, 1956, was 53,914,355 and consisted of 21,769,699 subscribers and 32,144,756 dependents . . . an average of 2.48 members per subscriber contract. The national per cent of the population enrolled by Blue Cross Plans rose to 30.14. Enrollment in six states has exceeded 50 per cent of the state population—Rhode Island, Delaware, New York, Pennsylvania, Ohio, and District of Columbia.

Comparable Michigan Hospital Service figures as of

Thirst, too, seeks quality



December 31, 1956: Enrollment, 3,621,746 consisting of subscribers, 1,343,002 and 2,278,744 dependents . . . an average of 2.7 per subscriber contract. MHS at that date had enrolled 47.49 per cent of the state population. Michigan Medical Service for 1956: Enrollment, 3,613,263, consisting of subscribers, 316,066 and 2,297,197 dependents . . . an average of 2.7 per contract.

* * *

MEDICAL TELEVISION SHOWS

Produced by Michigan Health Council

WJBK-TV, Detroit

March 3—Subject: Attitudes and Alcoholism—Guests: Melvin Selzer, M.D., of Ypsilanti, and George Nimmo of Lansing.

March 10—Subject: Postgraduate Medical Education (M.C.I.)—Guests: Cecil W. Lepard, M.D., Detroit, and Otto O. Beck, M.D., Birmingham.

March 17—Subject: Vision—(Films—Eyes for Tomorrow and Light Is What You Make It).

March 24—Subject: Medical Technologists—Guest: Miss Dorothea Kanellos, Detroit. Also Film—Career Medical Technologist.

March 31—Subject: Orthodontics—Guests: Marvin Davis, D.D.S., and Bernard W. Lyon, D.D.S., both of Detroit.

WKAR, TV East Lansing

March 14—Subject: Operation Stop Polio—Guests: George A. Sherman, M.D., Fred S. Leeder, M.D., Jack C. Krause, and William Emery, all of Lansing.

March 28—Subject: Medical Technology—An Interesting Career—Guests: Marion Bennett, M.T., Sue Walters, M.T., and Margaret Smith, M.T., all of Lansing, and Athalie Lundberg, M.D., and Mary Baker, M.T., both of East Lansing.

* * *

Carbon Monoxide Danger—Automobile.—The University of Michigan and the City of Detroit are co-operating in a project which may point the finger of responsibility for many automobile accidents on an unavoidable by-product of our motorized age—carbon monoxide fumes.

The study is financed by a grant of \$44,000 from the U. S. Public Health Service.

Although there is no direct evidence so far that odorless carbon monoxide gases released in automobile exhaust have anything to do with the causation of accidents, it is known that certain physiological responses are affected by excessive inhalation of this gas, says Warren A. Cook of the U-M School of Public Health and Institute of Industrial Health, director of the study.

It is not necessarily the carbon monoxide itself which causes loss of visual sharpness, and increases drowsiness or headaches. These responses result from the chemical reaction which occurs when gas meets blood. Carbon monoxide has 200 times the affinity for combining with hemoglobin as does oxygen. This deprives the hemoglobin of its capacity for a normal oxygen content in the blood.

Field work for the investigation is being done on the streets of Detroit with the co-operation and assistance of the Detroit Health Department and its Bureau of Industrial Hygiene, the Detroit Police Department, the Department of Streets and Traffic, the Detroit Street

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Railway and the Detroit Edison Company. The School of Public Health administers the study.

Initial studies recording the amount of carbon monoxide in the air throughout the day and night have shown a lower number of parts per million of carbon monoxide in the air on the depressed express highways than on surface streets.

The U-M investigators are also interested in this study from its possible implications in various phases of occupational health. Although no information is available yet, scientists will be interested in professional drivers, truckers, cab drivers, delivery men, policemen, and others who are exposed to the possible harmful effects of carbon monoxide for as much as eight hours a day.

In order to keep the industry fully informed and to also have the advantage of its experience, a member of the Automobile Manufacturers Association has been invited to join the Project Advisory Committee. Target date for completion of the field work is fall, 1957.

* * *

The International Academy of Proctology announces the establishment of a Teaching and Research Fellowship in Proctology under the direction of Dr. Marcus D. Kogel, Dean of the Albert Einstein College of Medicine, New York. The Academy has voted a \$1,000 annual grant for each of three years to assist in the development of research and educational projects in proctology at the University.

The 1957 grant was accepted for the College by Dr. Abraham White, Associate Dean and Professor and Chairman of the Department of Biochemistry, at the

Ninth Annual Teaching Seminar of the International Academy of Proctology, April 29-May 2, 1957, at the Plaza, New York City.

One of the projects developed under this grant has been a tissue slide "library" for teaching purposes under the direction of Dr. Alfred Angrist, Professor of Pathology.

As emphasized by the founder and secretary of the International Academy of Proctology, Dr. Alfred J. Cantor, Flushing, New York, at the time of the Eighth Annual Teaching Seminar of the Academy in Chicago, the major function of the Academy is educational. All Academy funds are to be used for research and teaching projects in proctology so that earlier diagnosis and better treatment of patients with diseases of the colon and rectum may be made universally available.

* * *

Trans-Ocean Joint Meeting.—On Wednesday, June 5, the Harvey Tercentenary Congress will meet in London in the Great Hall of the Royal College of Surgeons to discuss "The Results of Cardiac Surgery." This meeting will commemorate the 300th anniversary of the death of William Harvey, the English physiologist who first described the circulation of the blood.

At the same time, the American Medical Association will meet in Carnegie Hall in New York City at 10:15 a.m. (EDT) where the Symposium on the Results of Cardiac Surgery will be carried to New York through the courtesy of Smith, Kline & French Laboratories. The two groups will be in direct communication with conversations carried by telephone and amplified in both places.

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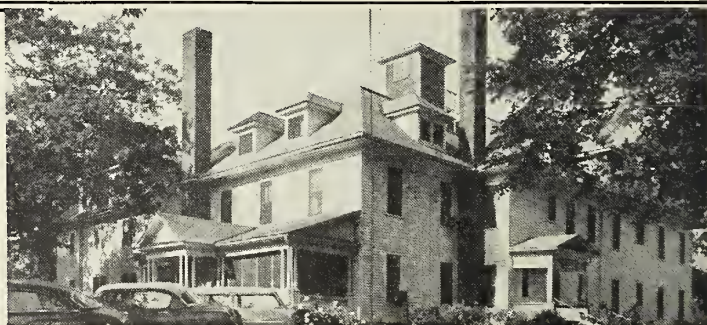
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WOMAN'S AUXILIARY TO THE AMERICAN MEDICAL ASSOCIATION

Thirty-fourth Annual Meeting

New York State is honored by serving as host to the American Medical Association and its Woman's Auxiliary, the latter, the parent body of all State and County Auxiliaries.

Mrs. Harry F. Pohlmann of Middletown, New York, a past President of the Woman's Auxiliary to the Medical Society of the State of New York and past chairman of several committees of the AMA Auxiliary, has been named Convention Chairman for this meeting by the national President, Mrs. Robert Flanders, of Manchester, New Hampshire.

Headquarters for the Auxiliary's meeting will be the Hotel Roosevelt at Madison Avenue and 45th Street, New York, from June 3 to 7, 1957. The Roosevelt is within walking distance of the Waldorf-Astoria Hotel, where the AMA House of Delegates meet, and proximity to Fifth Avenue and Madison Avenue shops, theatres and innumerable points of interest, make the location of headquarters ideal.

Registration will open on Sunday, June 2, at 11:30 a.m. and will continue through Thursday. On Monday, June 3, and Wednesday afternoon, June 5, there will be round table discussions of interest and educational value to all physicians' wives. Members and guests are cordially invited. The general meeting will be held Tuesday, Wednesday, and Thursday until noon, and a Board

of Directors' meeting at one o'clock on Thursday. A post-convention Workshop for State Presidents, Presidents-Elect and National Committee Chairmen will convene Friday, June 7.

Social activities include:

Monday, June 3—Tea, honoring President and President-Elect.

Tuesday, June 4—Luncheon in honor of the National Past Presidents, at which Dr. Howard Rusk, Director of the Institute of Physical Medicine and Rehabilitation of the New York University Bellevue Medical Center, will be the guest speaker. Dr. Rusk needs no introduction—he is internationally known and is a fine speaker.

Wednesday, June 5—Luncheon in honor of the National President and President-Elect. Dr. Dwight H. Murray, President of the American Medical Association, will be the guest speaker.

Thursday, June 6—Annual Dinner for Auxiliary members, husbands and guests, at which the guest speaker will be Professor Allen Richard Foley of Dartmouth College.

It is hoped that each State and County Auxiliary and the territorial Auxiliaries will be well represented. A warm welcome awaits everyone, and a profitable meeting and many hours of pleasure will make your visit a memorable one.

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Kenneth A. Dahl, Administrator



SIXTY-FOURTH ANNUAL MEETING OF THE UPPER PENINSULA MEDICAL SOCIETY

Houghton, Michigan, June 21-22, 1957

Thursday, June 20

A.M.

9:00 Executive Committee of The Council of MSMS will meet all day at the Miscowauk Club, in Calumet. Dr. and Mrs. T. P. Wickliffe will be hosts. All MSMS members are invited to the session to see how The Council functions.

P.M.

6:00 Cocktails and buffet supper for the exhibitors at the Onigaming Yacht Club in Houghton. Houghton-Baraga-Keweenaw Society will be host. All visitors are invited on a "Dutch-Treat" basis.

Friday, June 21

A.M.

9:00 Registration and View Exhibits—MCMT Union Ballroom.

9:45 Welcome—T. P. Wickliffe, President, Upper Peninsula Medical Society.

All Scientific Meetings at the Union.

Moderator—SIMON LEVIN, M.D.

10:00 R. J. ROGERS, M.D. "Application of Smear Technique in the Diagnosis of Cancer"

10:30 ARNOLD JACKSON, M.D. "Regional Enteritis"

11:00 FRANCIS MURPHY, M.D. "Diagnosis and Treatment of Acute Coronary Conditions"

11:30 MOSES COOPERSTOCK, M.D. "Present-Day Trends in Infant Feeding"

M.

12:00 Luncheon at Union (Tickets to be purchased at Registration)

Moderator—A. M. ROCHE, M.D.

P.M.

2:00 JOSEPH GALE, M.D. "Mediastinal Tumors"

2:30 HARRISON McLAUGHLIN, M.D. "General Principles in the Management of Fractures"

3:00 CARL MOYER, M.D. "Present Ideas of Treatment of Varicose Veins and Ulcers"

3:30 Recess to View Exhibits

Moderator—PERCY MURPHY, M.D.

4:00 HAROLD FALLS, M.D. "Constitutional Disease"

4:30 G. J. CURRY, M.D. "The Fractured Wrist"

5:00 A. C. CURTIS, M.D. "Some Recent Studies on the Abnormalities of Pigmentation"

5:30 L. F. FOSTER, M.D., Secretary MSMS
TOM PATON, Michigan Medical Service Representative

6:30 Cocktails and Dinner—Douglass House, Houghton. (Tickets to be purchased at Registration)

8:30 Introduction—T. P. WICKLIFFE, M.D., President
Upper Peninsula Medical Society
Public Address at Auditorium, Houghton High School
ARCH WALLS, M.D., President, MSMS

Saturday, June 22

Moderator—ALFRED LABINE, M.D.

A.M.

9:00 R. O. BERGAN, M.D. "Antibiotic Therapy in Pediatrics, Recent Developments"

9:30 HARRISON McLAUGHLIN, M.D., RAHN, M.D.,
LYTTLE, M.D., G. J. CURRY, M.D. Panel on
"Trauma"

10:30 View Exhibits

11:00 HAROLD WALDER, M.D. "Antibiotics in Urinary Tract Infections"

11:30 MEYER DAVIES, M.D. (to be announced)
M.

12:00 End of Scientific Meeting

P.M.

6:00 Cocktails, Michigan Medical Service, Host.
Cocktails, Dinner and Dance at Onigaming Yacht Club. (Tickets to be purchased at Registration.)

BLUE SHIELD LEAVES LOW-VAULTED PAST

(Continued from Page 572)

\$25 for a consultation, \$15 per hour or fraction thereof for "prolonged detention with patient in critical condition," and also such increased surgical fees as \$500 for the excision of an intervertebral disk with spinal fusion, for cardiorrhaphy or for total gastrectomy instead of the current \$300. Furthermore, the Blue Shield Fee Committee is presently working on the difficult problems of preparing a table of *relative* values for various procedures. Once this is done, it will be possible to consider a simultaneous percentage increase in fees "across the board" to correspond with increasing income levels, whenever such an increase is needed.—Editorial, *New England Journal of Medicine*, Feb. 28, 1957.

Correspondence

Dear Dr. Haughey:

I was very much amazed at the very wide circulation of *THE JOURNAL*. Requests for reprints of "Arabian Medicine in the Post-Koranic Period" came from all over the country and even from Europe and the Middle East.

With warm personal regards, I am,

Sincerely yours,

BENJAMIN L. GORDON

Ventnor, New Jersey
March 5, 1957

* * *

Dear Doctor Haughey:

I hope sometime soon you will see fit to editorialize this society in transition and what effort the physiatrist is trying to exert to prevent our public health group, non-official more than official, from dislocating the private practice of medicine in this fantastically hysterical endorsement of rehabilitation centers.

The word itself has so much semantic magic that entire communities, including members of our own profession, are seduced without ever applying objective reasoning before whole-hearted endorsement.

Even the Father of Rehabilitation himself, H. A. Rusk, M.D., has repudiated the idea of the Rehabilitation Institute and now has wholeheartedly entered into the chronic illness field guided by the sound grasp of the situation held by Dean W. Roberts, M.D., M.P.H.: "The Overall Picture of Long Term Illness." (*Journal of Chronic Diseases*, Vol. 1, Pages 149-159, Feb. 1955.)

Official, quasi-official and non-official public health people have continued, by inertia and perhaps pride, in the original direction proposed by Dr. Rusk. You will find all over this state, from Detroit to Battle Creek, a few busy beavers coming into a community, selling the community a real bill of goods; namely, this—"Now your community needs a few extra dollars. We have it. You have a curative workshop. Let us, with your facilities and our money, team up and get a Rehabilitation Center going." This sounds good (to everybody). Meantime, before even the Community Council, which has the overall planning of the community's needs in mind, has been informed, a Board is set up and incorporated as a non-profit agency. Generally, such a board consists of the most prominent and influential citizens of the community and they do have the interest of the community at heart—this is the sad thing. A few expedient individuals can sew up an entire community in its desire to do good—and we then have Rehabilitation Center ad infinitum with very often a doctor fronting for this non-profit corporation, as an administrator.

Dr. Haughey, I do not want social workers, vocational counsellors, and the Federal Government dictating for me or for any other physician, my relationship to my patient. Yet this is the thing we ask as physicians, every time we invite (having also been seduced) a rehabilitation center into our home community.

Sincerely,

K. McMORROW, M.D.

Detroit, Michigan
March 11, 1957

May, 1957

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BOOKS RECEIVED

HOME HEALTH EMERGENCIES. A Guide to Home Nursing and First Aid in Family Health Emergencies. Part One, Home Nursing; Part Two, First Aid. New York: Medical Department, The Equitable Life Assurance Society of the United States.

LITERATURE REVIEW. CIBA. Produced by the Medical Information Service For Internal Circulation. Vol. 1, No. 12 (Dec.) 1956. Basle, 1956.

THE ROCKEFELLER FOUNDATION ANNUAL REPORT, 1955. New York, 1956.

CLINICAL ORTHOPAEDICS. Anthony F. DePalma, Editor-in-Chief, with the assistance of the Associate Editors, the Board of Advisory Editors, The Board of Corresponding Editors. Number Seven. Philadelphia and Montreal. J. B. Lippincott Company. Price \$7.50.

TUBERCULOSIS IN OBSTETRICS AND GYNECOLOGY. By George Schaefer, M.D., F.A.C.S., F.I.C.S., Assistant Professor of Clinical Obstetrics and Gynecology, Cornell University Medical College; Attending Obstetrician and Gynecologist, Triboro Hospital; Diplomate American Board of Obstetrics and Gynecology; Fellow American Academy of Obstetrics and Gynecology; Fellow American Trudeau Society. With 58 halftone illustrations. Boston-Toronto: Little, Brown and Company, 1957. Price \$8.75.

THE YEARBOOK OF MODERN NURSING, 1956. A Source Book of Nursing. Editor, M. Cordelia Cowan, Nursing Educator, Author, Editor. Foreword by Mary M. Roberts, Editor Emeritus, American Journal of Nursing. New York: G. P. Putnam's Sons, 1957.

A PSYCHIATRIC GLOSSARY. The Meaning of Words Most Frequently Used in Psychiatry. By the Committee on Public Information, American Psychiatric Association. New York: American Psychiatric Association, 1957.

COMPETITIVE PRESSURE AND DEMOCRATIC CONSENT. By Morris Janowitz and Dwaine Marvick. University of Michigan, Michigan Governmental Studies, No. 32. An Interpretation of the 1952 Presi-

dential Election. Morris Janowitz is Associate Professor of Sociology and Research Associate, Institute of Public Administration, University of Michigan, and Dwaine Marvick is Assistant Professor of Political Science, University of California (Los Angeles). Ann Arbor: Bureau of Government, Institute of Public Administration, University of Michigan, 1956. Price \$2.75.

CLINICAL ORTHOPAEDICS. Anthony F. DePalma, Editor-in-Chief, with the assistance of the Associate Editors, The Board of Advisory Editors, The Board of Corresponding Editors. Number Eight. Fall, 1956. Philadelphia and Montreal: J. B. Lippincott Company, 1956. Price \$7.50.

Volume 8, like its predecessors, continues the symposium form of presentation, which this time deals with chronic hereditary diseases and developmental anomalies. In addition, there is a special section dealing with motorist injuries and motorist safety.

The current volume continues to be quite readable, both in the manner of material presentation and typographical layout. As a single unit, this book is of primary interest to the orthopedist and not to the casual passer-by, however, the series as a whole would be a valuable addition to any physician's library.

The lead section, dealing with chronic hereditary diseases and developmental anomalies, does not attempt to cover the field in the space available, but does concentrate primarily on defects and diseases of the skeleton with a particularly excellent review of the genetics of joint diseases.

The second section, concerning general orthopaedics, presents a discussion of several orthopedic diseases, not particularly related to one another or to the lead section, and has a discussion of problems related to the use of prostheses in children, which is a wonderful review of the etiologic and psychobiologic factors involved. This particular article does not deal with the technical factors involved, but with all the "patient-as-a-whole" factors with which any physician might find himself involved.

The third section, dealing with motorist injuries and motorist safety, is often technical, but from an engineering view would be of great interest to the motoring buff. The historical development of auto crash injury research is presented too, along with a good paper on the engineering aspects of fractures.

R.H.A.

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GENERAL UROLOGY. By Donald R. Smith, M.D., Clinical Professor of Urology and Chairman of the Department of Urology, University of California School of Medicine, San Francisco; Consulting Urologist, San Francisco Hospital, and Consulting Surgeon (Urology), Veteran's Hospital, San Francisco; Chief of the Department of Urology, St. Luke's Hospital, San Francisco. Illustrated by Ralph Sweet. Los Altos, California: Lange Medical Publications, 1957. Price \$4.50.

Doctor Smith has treated the subjects in his book in very comprehensive simplified manner which really conveys to the reader the essence of the topic without a lot of surplus reading. It is an excellent reference work for the busy urologist who desires the synopsis of a subject written in an easily understood capsule form. I am sure there is a ready need for a book such as this, and I feel it is a most outstanding book of its kind.

W. R. C.

CARCINOMA OF THE BREAST: The Study and Treatment of the Patient. By Andrew G. Jessiman, F.R.C.S., M.D., Henry E. Warren, Fellow and Assistant in Surgery, Harvard Medical School; Junior Associate in Surgery and Cancer Co-ordinator, Peter Bent Brigham Hospital, and Francis D. Moore, M.D., Moseley Professor of Surgery, Harvard Medical School; Surgeon in Chief, Peter Bent Brigham Hospital. 115 pages. Illus. Boston and Toronto: Little, Brown and Company, 1956.

This book is part of the *New England Journal of Medicine* Medical Progress Series, and is an expansion of the very fine articles on this topic which appeared in that journal. Charts, pictures of gross and microscopic specimens of carcinoma of the breast and many illustrations have been added which did not appear in the original articles.

Many of the controversial aspects of the treatment of this field of cancer are presented fully by the authors who present their own conclusions after thorough discussion, giving the readers the fruits of their experience based on the premise: "In the light of the present evidence, what is best for the patient?" The current "McWhirter controversy" with its local treatment is presented; when to use irradiation; androgen or estrogen therapy; cortisone; when to use castration (x-ray versus orchiectomy); adrenalectomy; hypophysectomy are all thoroughly discussed.

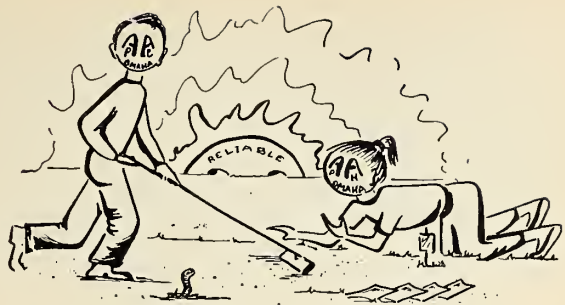
Particularly good treatment is given the various stages of the disease in Chapter VIII as the authors divide breast cancer patients into eight different clinical types and present a suggested outline of treatment for each type (the "young and early,"—"the old and early"—"no bones" etc. This particular classification is carried out with a completeness rarely found in other monographs. The summary suggests: "Accurate surgery, accurate endocrinology and accurate radiology are equal-essential in achieving the curative or palliative results made available to the patient by recent advances in medical science."

This is an excellent reference for the surgeon in particular, and would interest every physician whose patients fall in this field.

S. B. W.

1957

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acts as medical consultant to the professional staff of the Michigan Office of Vocational Rehabilitation. Requires eligibility for licensure to practice medicine in Michigan and four years' experience in public health. Write for further job details to Michigan Department of Health, Lansing, or Michigan Civil Service, Lansing 13, Michigan.

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THE JOURNAL

of the Michigan State Medical Society

VOLUME 56

JUNE, 1957

NUMBER 6

Contributors to This Issue



L. FERNALD FOSTER,
M.D.



ARCH WALLS, M.D.



JAY C. KETCHUM



GEORGE W. SLAGLE,
M.D.

THE COVER refers to Michigan Medical Service to which this number of THE JOURNAL is dedicated. The Blue Shield Plan of Michigan has travelled far in serving our people's health needs. Now it has reached a crossroads. Its future progress depends on decisions that must be made by Michigan's medical men NOW.

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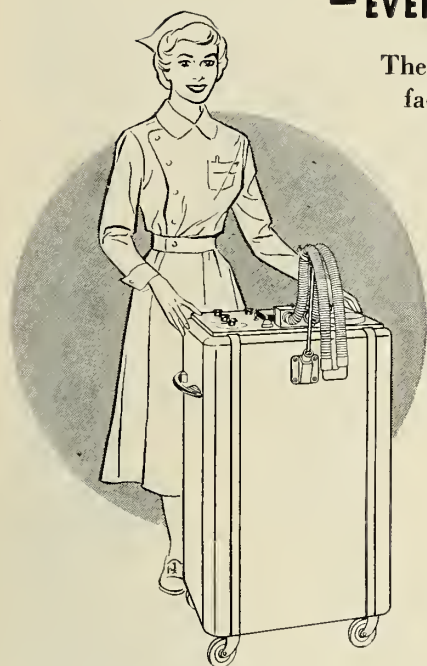
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Wayne University Clinic Days and Alumni Reunion

Wayne Clinic Days, held at Wayne University, April 30 and May 1, 1957, attracted more than 700 physicians from across the nation. This was the 71st annual "Clinic Days" program designed by the alumni association to help physicians keep abreast of the rapid progress being made by modern medical science.

Another highlight on Wednesday's agenda was the annual Alumni Reunion Dinner celebrating the fiftieth anniversary of the Class of 1907 along with announcement of distinguished service citations and scholarship awards to outstanding needy students.

The 1907 graduates who attended and received



Class of 1907 Golden Anniversary Class at 71st Annual Session, Clinical Program and Alumni Reunion of the Wayne State University College of Medicine Alumni Association, May 1, 1957, Hotel Fort Shelby, Detroit.

Reading left to right: (first row) Raymond C. Andries, M.D., Herman H. Runo, M.D., Robert M. Carmichael, M.D., Castro J. Power, M.D.

(Second row) Raymond B. Glemet, M.D., Fred J. Drolett, M.D., Frank A. Boet, M.D., Arthur J. Griffith, M.D., Ernest M. Ling, M.D., George C. Hardy, M.D.

Activities Tuesday included ward-rounds at Receiving Hospital, discussion periods, clinical demonstrations and classroom instruction by members of Wayne's medical faculty. Sessions also were held at the University's Medical Science building, Lafayette Clinic and Kresge Eye Institute.

Six top-ranking medical men who presented papers on their respective fields during Wednesday's program, included: Herman K. Hellerstein, M.D., Cleveland, Ohio, "Returning the Cardiac Patient to Work"; Clyde L. Randall, M.D., Buffalo, N. Y., "Clinical Evidences of the Inadequate Placenta"; Campbell M. Gardner, M.D., Montreal, Canada, "Diagnosis and Treatment of Various Lesions of the Stomach"; Raymond W. Waggoner, M.D., Ann Arbor, "The Application of Psychiatry in General Practice"; William L. Riker, M.D., Chicago, Ill., "Emergency Surgery in the Newborn"; and Maurice A. Schnitker, M.D., Toledo, Ohio, "Low-Grade Infection of the Urinary Tract."

golden diplomas were: Raymond C. Andries, Detroit; Frank A. Boet, Grand Rapids; Robert H. Carmichael, Tinley Park, Illinois; Fred J. Drolett, Lansing; Raymond B. Glemet, Detroit; Arthur J. Griffith, Detroit; George C. Hardy, Rochester, Michigan; Ernest M. Ling, Hancock; Castro J. Power, Harrison; Herman H. Runo, Reedley, California.

Those unable to attend, but all of whom sent greetings, were: Clifford B. Clark, Miami; William P. Johns, Long Beach, California; Samuel M. Kaufman, New York; Nathan P. Levin, Los Angeles; L. Leonard Meddaugh, Millbrae, California, and Montgomery A. Stuart, Roanoke, Virginia.

Alumni Awards were presented as follows: Medical Alumni Sophomore Scholarship Award to Robert J. Thompson, 1959; Medical Alumni Senior Scholarship Award to Myron H. Joyrich, 1957.

Distinguished Service Citations were presented

(Continued on Page 672)

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PEPTIC ULCER HYPERTENSION COLITIS NEUROSES DYSPNEA INSOMNIA
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ATARAX Syrup, 10 mg. per tsp., in pint bottles.
Prescription only.

(Continued from Page 670)

this year to: Daniel E. Halsey, M.D., 1934, for years of services as advisor and professor in the College; Clarence E. Umphrey, M.D., 1924, for

was a member of the medical profession: James M. Robb, M.D., physician and professor of surgery in Wayne State University's College of Medicine, who has earned a distinguished record.



Pictured at the 71st Annual Session, Clinical Program and Alumni Reunion of The Wayne State University College of Medicine Alumni Association, April 30, 1957, are (left to right): Don W. McLean, M.D., president of the Wayne State University College of Medicine Alumni Association; William J. Stapleton, Jr., M.D., historian of the Wayne State University College of Medicine Alumni Association; Gordon H. Scott, Dean, Wayne State University College of Medicine; Castro J. Power, M.D., Class of 1907; Lawrence Pratt, M.D., president-elect, Wayne State University College of Medicine Alumni Association.



James Milton Robb, M.D., '08 (left) receiving his Alumni Award from Dr. Clarence B. Hilberry (right), president of Wayne State University, at the 89th Annual Alumni Reunion on the evening of May 18, 1957.

Seated (right) is Gladys M. Wright, '41, Chairman of the 1957 Alumni Reunion.

extraordinary service as advisor, Councilor, President of MSMS, and continuing service.

On May 18, 1957, at a grand banquet for the 89th alumni reunion, at the Sheraton-Cadillac, President Clarence B. Hilberry presented Honorary Alumni Citations to five persons, of whom one

The citation reads as follows:

DR. JAMES MILTON ROBB, a graduate in Medicine in 1908, for more than forty years has been a teacher in the College of Medicine and is now one of this country's most distinguished practitioners in the field of Ophthalmology and Otolaryngology.

Honored by the Distinguished Service Citation of the Wayne University Medical Alumni Association, the Michigan State Medical Society Citation, and the Selective Service Medal of the Congress of the United States, he has served as President of the Detroit Academy of Medicine, of the Wayne County Medical Society, of the Michigan State Medical Society, of the American Academy of Ophthalmology and Otolaryngology, and as Chairman of the Section for the American Medical Association and Member of the Board of Governors of the American College of Surgeons.

As a citizen in this community he has been an active leader in the work of the Community Fund, the Detroit Symphony Society, Institute of Arts Founders Society, Friends of the Public Library, and of the Cranbrook Institute of Science.

The University recognizes with pride the brilliant career in medicine and surgery and the fine contribution to civic life of this distinguished Alumnus.

When at all practical, surgery is the treatment of choice for thyroid cancer.

PATHIBAMATE

Comments on PATHIBAMATE from clinical investigators

• "I find it easy to keep patients using the drug continuously and faithfully. I feel sure this is due to the desirable effect of the tranquilizing drug."⁵

• "The results in several people who were previously on belladonna-phenobarbital preparations are particularly interesting. Several people volunteered that they felt a great deal better on the present medication and noted less of the loginess associated with barbiturate administration."⁶

• PATHIBAMATE... "will favorably influence a majority of subjects suffering from various forms of gastrointestinal neurosis in which spasmodic manifestations and nervous tension are major clinical symptoms."⁷

• "In the patients with functional disturbances of the colon with a high emotional overlay, this has been to date a most effective drug."⁵

References: 1. Borrus, J. C.: *M. Clin. North America*, 1957. 2. Gillette, H. E.: *Internat. Rec. Med. & G. P.* 169:453, 1956. 3. Pennington, V. M.: *J.A.M.A.*, 1957. 4. Cayer, D.: Prolonged Anticholinergic Therapy of Duodenal Ulcer. *Am. J. Dig. Dis.* 1:301-309 (1956). 5. McGlone, F. B.: Personal Communication to Lederle Laboratories. 6. Texter, E. C., Jr.: Personal Communication to Lederle Laboratories. 7. Bauer, H. G. McGavack, T. H.: Personal Communication to Lederle Laboratories.

Supplied: Bottles of 100 and 1000

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Rx

*Pathibamate #100
Sig: 1 tab. t.i.d. at mealtime.
2 tabs. at bedtime.*



AMA Washington Letter

THE MONTH IN WASHINGTON

Again the Jenkins-Keogh plan is up for consideration in Congress. While there is no assurance it will be passed, or even get out of the House Ways and Means Committee, many sponsors of the legislation this year are united in one organization and are making themselves felt on Capitol Hill.

Briefly, this bill would allow any self-employed person to put a limited portion of his income into a retirement fund without paying income taxes on the money. Taxes would be paid when the money was received as pension or retirement.

Sponsors of the Jenkins-Keogh plan point out that it very definitely is not legislation to give a special tax advantage to one group of people. For one thing, every self-employed person would be eligible, from farmers to doctors and from opera singers to architects. For another, corporations since 1942 have been allowed to put money into retirement funds for their employees without payment of federal taxes on the money; the self-employed merely want the same consideration.

At various times the American Medical Association has led in the campaign for enactment of legislation of this type. Two years ago the House Ways and Means Committee voted to report it out, as part of a broader tax bill, but the committee never actually got around to sending the combined bill to the House floor.

Now the lead is being taken by a newly formed American Thrift Assembly, or officially the American Thrift Assembly for Ten Million Self-Employed. In addition to the AMA, the new group has the support of American Dental Association, American Bar Association, and a score or more of other national organizations that represent the self-employed.

After the Congressional session was well under way, the ATA surveyed the political-legislative climate and found it favorable for Jenkins-Keogh. Then in early May the assembly asked its constituent associations to go to work. They were urged to have all members contact the House Ways and Means Committee with requests that the Jenkins-Keogh bill be reported favorably to the House floor. Assembly strategists are confident that if the committee hears from enough of the people who would be affected, it will approve the bill before adjournment. Then, if there isn't time for House action this year, that step can come next year.

Economy has been the main obstacle in the

path of Jenkins-Keogh—the fear on the part of the Treasury Department that passage of the bill would mean a serious loss of income tax revenue. However, the Treasury has never denied that the bill is justified to equalize tax status for the self-employed in relation to corporation employees.

Answering the economy argument, the Assembly makes two points:

First, the set aside funds, invested in the country's economy, would stimulate business and develop far more in new income tax payments than it would cost.

Second, because the self-employed who retain their health rarely retire at any arbitrary age, many of them in the years past 65 would remain in a tax bracket not significantly lower than when they paid into the retirement fund.

Notes

When Congress votes the money, the new home of the National Library of Medicine will be constructed at Bethesda, Maryland, near the National Institutes of Health and the Navy Medical Center. This site was selected by the board of regents at its second meeting.

* * *

At the request of Speaker Rayburn, the House Interstate and Foreign Commerce Committee has set up a special subcommittee with authority to find out if government agencies are expanding their operations beyond limits intended by Congress. The subcommittee expects to continue its investigations between the sessions of Congress.

* * *

The continuing national health survey is under way. Each month from now on, 140 Census Bureau interviewers will visit 3,000 homes, asking questions about illness and disability. On the basis of the data collected, the Public Health Service will publish national and regional reports on morbidity and mortality.

* * *

Because of his achievements in the advance of mental health, Dr. William C. Menninger has been selected by the U. S. Chamber of Commerce as "one of the great living Americans."

* * *

Because of widespread interest aroused by Senate hearings, there is considerable pressure for action before adjournment on legislation for some form of federal control over union welfare funds. One bill, by Senator Goldwater, would lay down strict procedures, including regular audits.

Paris, too, knows and uses Pentothal...

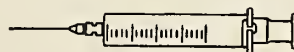


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followed the world over*

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PENTOTHAL[®] Sodium



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706136

JUNE, 1957

Say you saw it in the Journal of the Michigan State Medical Society

677

AMA News Notes

NEW "AMA IN ACTION" BOOKLET

An attractive new booklet describing "AMA in Action" as it moves ahead toward better medicine, better patient care, better distribution of medical services, better informed public, and better public health will be off the presses this month. This 44-page, illustrated pamphlet points out various AMA services for physician-members and the public and lists benefits to both the medical profession and the general public. Copies of "AMA in Action" will be sent to AMA officers, trustees and delegates, national opinion leaders, medical schools, and pharmaceutical representatives. In addition, limited quantities will be made available to state and county medical societies for distribution to their key officials.

AMA TO HONOR RADIO STATIONS

Eighty-seven radio stations across the country will be honored by the American Medical Association this year for broadcasting a minimum of ten complete AMA health education radio transcriptions within the past five years. Since 1954, a total of 265 radio stations throughout the United States and Alaska have qualified for this distinction. Many of the radio stations using AMA electrical transcriptions are serviced directly from the Bureau of Health Education through county medical societies. In addition, thirteen state medical societies function as state distributors, arranging the placement of these programs directly with stations in their areas.

PROFESSIONAL LIABILITY FILM

A new dramatic film pointing up ways of preventing professional liability claims and suits will be available July 1 for medical society meetings. This new film, titled "The Doctor Defendant," is the second in a series of films on various medicolegal problems being produced by the Wm. S. Merrill pharmaceutical company in co-operation with the American Medical Association and the American Bar Association. Bookings may be arranged through AMA's Film Library. It was shown for the first time Wednesday, June 5, during the AMA's annual meeting in New York City.

FOREIGN FILM PROGRAM

The largest international medical film exhibition in history was staged by the American Medical Association during its annual meeting June 3-7 in New York City. Forty medical motion pictures, representing work by medical scientists from a dozen foreign countries, were shown in the Barbizon Plaza Hotel theater.

Two unusual Japanese films were among those shown: (1) "A Study on the Intrauterine Selfmovement of the Early Human Fetus"—the first motion picture ever made of a living human fetus still in the mother's womb, and (2) a 25-minute film entitled, "Structure and Function of the Middle Ear," showing the actual operation of the human hearing mechanism, including

vibration of the tympanic membrane (a drumhead-like structure that takes sound from the air for transmission to the brain).

Films from the following countries also were shown: France, Austria, West Germany, Argentina, Switzerland, Guatemala, Mexico, Canada, Italy, Brazil, and England.

The exhibition was sponsored by Johnson and Johnson, manufacturers of medical supplies, in co-operation with AMA's Motion Pictures and Medical Television.

USPHS LAUNCHES NATIONWIDE HEALTH SURVEY

A new National Health Survey was instigated in May by the U. S. Public Health Service. A household interview survey was conducted in 330 sampling areas throughout the country. Legislation enacted during the last session of Congress authorized the Surgeon General of the USPHS to make surveys and special studies of the United States population to determine the extent of illness and disability and related information.

The American Medical Association supported this legislation while cautioning that any survey in this area should be conducted in such a manner that all interested parties can agree substantially with its conclusions.

Facts collected include statistics on the number, age, sex, and other personal characteristics of persons suffering from diseases, injuries, or handicapping conditions; the length of time that these people have been prevented from carrying on their usual activities, and whether or not the conditions have had medical attention. The last survey of this nature was conducted twenty years ago.

The Council also announced that the household interview phase of the survey is to be a continuing study for an indefinite period of time. Field work will be handled by the Bureau of the Census for the USPHS, following primary sampling units already established in counties, parts of counties, combinations of counties, or metropolitan areas. At least one sampling unit is located in every state.

MSMS ANNUAL MEETING

September 25-26-27, 1957

Civic Auditorium, Pantlind Hotel,

Grand Rapids

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M.D.: Can't stop Johnny! He
hit a home run and is active
again in extracurricular school
activities. Asthmatic distress
rare with that drug you Rx'd.
—Thank you,
GRATEFUL PARENTS.

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Steroid-Nutritional Therapy Is Constructive Approach for the First Signs of Aging

Emphasis on Early Treatment Before "Damage" Is Done

The first subtle suggestions of physiologic deterioration should not be dismissed if serious somatic and metabolic disorders are to be avoided. Prompt institution of steroid-nutritional therapy may forestall and even reverse premature "damage" and help prolong the active life of the patient.

Some of the most common symptoms of declining gonadal function and nutritional insufficiency are vague pains in the bones and joints, easy fatigability, decreased muscular tone, loss of appetite, chronic mental fatigue and general malaise. In older patients, these complaints are frequently indicative of degenerative processes when they cannot be attributed to a specific cause.

The comprehensive formula of "Mediatric" is specifically designed to provide three therapeutic services: 1. *protect* general metabolic integrity; 2. *preserve* physiologic efficiency; 3. *prevent* premature damage.

"Mediatric" supplies estrogen and androgen in small amounts to exert a favorable influence on bone and protein metabolism,¹ restore muscle tone and coordination,² and increase the tensile strength of the skin.³ The two steroids appear to have an additive metabolic effect, while their opposing action on sex-linked tissue minimizes the incidence of untoward reactions.

Dietary supplements, including essential B vitamins and ascorbic acid, ensure adequate nutrition, prevent moderate anemias, and maintain efficient enzyme systems. The mood elevat-

ing effect of a mild antidepressant helps restore emotional stability and increases mental alertness.

Recommended dosages: Male—1 tablet or 1 capsule (or 3 teaspoonfuls) daily, or as required. Female—1 tablet or 1 capsule (or 3 teaspoonfuls) daily, or as required, taken in 21 day courses with a rest period of one week between courses.

Bibliography on request.

"MEDIATRIC"® Tablets and Capsules

Each capsule or tablet contains:

Conjugated estrogens equine ("Premarin"®)	0.25 mg.
Methyltestosterone	2.5 mg.
Vitamin C (ascorbic acid)	50.0 mg.
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Vitamin B ₁₂ with intrinsic factor concentrate	1/6 U.S.P. Unit
Folic acid U.S.P.	0.33 mg.
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d-Desoxyephedrine HCl	1.0 mg.
Tablets—No. 752—bottles of 100 and 1,000.	
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"MEDIATRIC" Liquid

Each 15 cc. (3 teaspoonfuls) contains:

Conjugated estrogens equine ("Premarin"®)	0.25 mg.
Methyltestosterone	2.5 mg.
Thiamine HCl (B ₁)	5.0 mg.
Vitamin B ₁₂	1.5 mcg.
Folic acid U.S.P.	0.33 mg.
d-Desoxyephedrine HCl	1.0 mg.

Contains 15% alcohol

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des added certainty in antibiotic therapy particularly for
90% of the patient population treated in home or office...

spectrum synergistically strengthened
CIN provides the antimicrobial spectrum of
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SIGMAMYCIN CAPSULES—250 mg. (oleandomycin 83 mg.,
e 167 mg.), bottles of 16 and 100; 100 mg. (oleandomy-

cin 33 mg., tetracycline 67 mg.), bottles of 25 and 100. SIGMAMYCIN
FOR ORAL SUSPENSION—1.5 Gm., 125 mg. per 5 cc. teaspoonful
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PR REPORT

MEDICAL EDUCATION WEEK

The second annual Medical Education Week, April 21-27, went off with a bigger bang than last year because of increased activity on the part of county medical societies throughout the State.

Press clippings flowing into the MSMS headquarters show a significant number of society-sponsored hospital "open house" programs tied in with one or more press releases pointing out the local benefits accruing from the broad medical education activity of Michigan's medical schools.

To co-ordinate the state-wide program, MSMS met with representatives of University of Michigan Medical School and Wayne State University College of Medicine. Each agreed to promote certain aspects of medical education, thus preventing duplication of press material.

MSMS arranged for Governor Williams to proclaim the April 21-27 week as Medical Education Week which resulted in an Associated Press dispatch saluting expanded facilities and service. In state-wide releases to all newspapers, radio and TV stations, MSMS used the theme that "Tomorrow's picture of health depends on the quality of medical education of today" and outlined the modern "triple play against disease" with the team composed of the medical profession, the medical schools and the allied medical groups.

Subsequent releases stressed the record number of beginning medical students and the continuing increase in the number of medical schools in the nation.

DOCTORS VISIT LEGISLATORS IN LANSING

County medical society representatives indicated their interest in the affairs of state by visiting legislators in Michigan's Capital City.

The program, begun in January, continued through the legislative session, which closed May 24.

By attending the legislative sessions with MSMS staff members, the doctors had an opportunity to impart the medical profession's views on over-all health questions to their elected representatives.

County societies participating included Genesee, Gratiot-Isabella-Clare, Macomb, Washtenaw and Wayne.

NEW FILMS AVAILABLE

"The Doctor Defendant" is the title of the second film in the AMA "Medicine and the Law" series which will be available for medical society showings beginning July 1. The thirty-four-

minute motion picture deals with prevention of professional liability action.

The new film is a companion to "The Medical Witness"—first in the series. Both productions are presented in co-operation with the American Bar Association.

"The Doctor Defendant" dramatically presents four case reports of situations which resulted in claims against physicians. In reviewing these alleged professional liability cases it also demonstrates how a county medical society's review committee functions.

Advance booking dates may be arranged by writing the AMA Film Library or MSMS.

* * *

A new film, "Glaucoma, What the General Practitioner Should Know," is now available for showing before county medical societies and specialized audiences. The film is presented by the National Society for the Prevention of Blindness and is available from them direct or through MSMS Public Relations Library (606 Townsend Street, Lansing, Michigan), without charge.

The motion picture explains the mechanism of glaucoma, symptoms aiding in diagnosis and explanation of the rationale of treatment. It is a 16-mm sound film in color which takes two minutes to show.

REGISTERED M.D.'S

The number of physicians registered in the American Medical Association Directory for 1956 is 218,061 (U.S. and Canada), plus 1,791 (U.S. dependencies), a total of 219,852. This includes graduates of Canadian and foreign schools.

In the past eighteen years, the United States schools have graduated 110,288—almost exactly half those listed if graduates from foreign schools and Canada, whose number is not available, are disregarded.

More than half of our doctors have entered the practice of medicine since prepayment was an established fact. Over 7,000 foreign graduates are serving as internes and house physicians in the United States.

NUMBER OF M.D. APPLICANTS

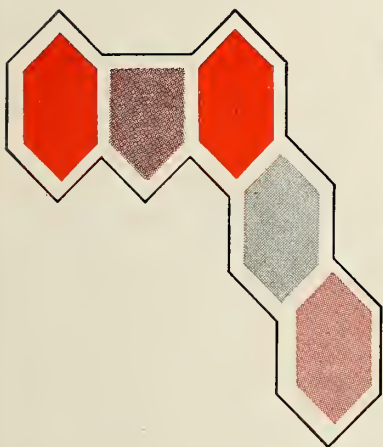
In 1955-56, Michigan had 4.1 entering freshmen medical students per 100,000 population as compared to 4.6 for the nation—one-half a student short. The University of Michigan accepted 201 freshmen students of 600 applications, but those applicants had filed 2 applications. Wayne State University accepted 71 of 324 who had filed 1,058 applications. The United States accepted 7,602 freshmen from 54 applicants who filed over 70,000 all told.

—AMA Council on Medical Education

unique derivative of *Rauwolfia canescens*

Harmonyl*

(Deserpidine, Abbott)



introduces a new degree of safety in major tranquilizing—antihypertensive therapy

Most significant: In extensive trials, Harmonyl has produced less mental and physical depression. And there are very few reports of the lethargy seen with many other rauwolfia preparations.



More than two years of clinical evaluation have proven Harmonyl a notably safe and effective agent in cases ranging from mild anxiety to major mental illnesses and in hypertension. Harmonyl exhibited significantly fewer and milder side effects in comparative studies with reserpine—while demonstrating effectiveness comparable to the most potent forms of rauwolfia.

Safety—plus marked clinical effectiveness
Harmonyl proved particularly effective, for example, in tranquilizing a group of 40 chronically ill, agitated senile patients.¹

Of particular interest is the observation that patients became more lucid and alert on Harmonyl therapy. And there was a complete absence of side effects with Harmonyl—although a similar group on reserpine developed such side effects as anorexia, headache, bizarre dreams, shakes, nausea and vomiting.

Following another eight-month study of chronic, hospitalized mental patients, Ferguson² stated:

- Harmonyl benefited at least 15% more

overactive patients and proved more potent in controlling aggression—requiring only one-half to two-thirds the dosage of reserpine.

- Patients experiencing side reactions on reserpine often were completely relieved when changed to Harmonyl.

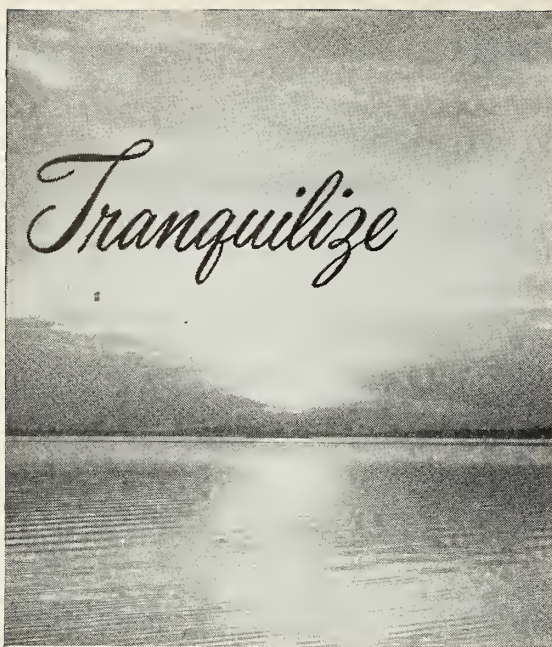
Ferguson concluded: “*The most notable impressions were the absence of side effects and relatively rapid onset of action with Harmonyl.*”

Comparative studies have shown Harmonyl and reserpine about equal in hypotensive effect. The tranquilizing action of the two drugs also appeared similar—except that few cases of giddiness, vertigo, sense of detached existence or disturbed sleep were seen with Harmonyl.

Professional literature is available upon request. Harmonyl is supplied in 0.1-mg., 0.25-mg., and 1-mg. tablets.

Abbott

References: 1. Communication to Abbott Laboratories, 1956. 2. Ferguson, J. T.: Comparison of Reserpine and Harmonyl in Psychiatric Patients: A Preliminary Report, *Journal Lancet*, 76:389, December, 1956. *Trademark



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- Soothes the central nervous system, produces calmness without hypnosis.
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- Does not impair mental or physical function.
- Orally effective within 30 minutes for sustained action up to 6 hours.
- Economical.

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of 100, 1000.*

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AMEF

Do you know what the letters AMEF stand for? Every doctor of medicine should realize what the American Medical Education Foundation stands for. We should know that this foundation is an effort on the part of the doctors of this nation to support medical education and research. We should know that if we contribute a million dollars, the industries of this country will contribute eight million.

We should know there are eighty-three, full-time or part-time medical schools, which will benefit.

We should know that the enrollment in medical schools has increased by 7,042 since 1919 and that the graduates have risen from 4,565 to 6,845 last year.

Do you know your contribution can be earmarked for the school of your choice and that it is tax deductible? One of our members contributed \$1,000 as a memorial to a son lost in military service. With the tax situation what it is, this splendid contribution cost him about \$500.00.

We should know that only about 18 per cent of our membership are contributors. This foundation will never flourish, or realize its purpose on such paucity. State, municipal and federal government now furnish 47.5 per cent of the basic Medical School operating budgets. Another 25 per cent may give our government the right to direct. It would appear that the control of medical care and education is rapidly disappearing from the medical ranks.

This splendid foundation should be supported by every Doctor of Medicine in the United States. If that statement is true, then our House of Delegates of Michigan should request our delegation to the American Medical Association to introduce a resolution at the next meeting of the AMA House of Delegates.

In the meantime, until a better way of support can be devised, will you mark the first week in July to make your most necessary contribution? Please mail to American Medical Education Foundation, 535 N. Dearborn Street, Chicago, Illinois.

C. E. UMPHREY, M.D.

Chairman, AMEF Committee for Michigan

Michigan is the largest State East of the Mississippi River—96,720 square miles of which 57,022 square miles are land, 1,194 are inland waters, and 38,504 are Great Lakes waters. Michigan has the longest shore line of any State. It also has 11,000 inland lakes, and 36,000 miles of streams.



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You and Your Business

HOUSE OF DELEGATES PROCEEDINGS

The Proceedings of the Special Session of the MSMS House of Delegates, held in Detroit, April 27, 1957, are included in this number of *THE JOURNAL*. For important information on the status of prepaid medical care plans, see pages 753-776.

ANALYSIS OF 1957 MICHIGAN CLINICAL INSTITUTE ATTENDANCE

Of the 1,654 doctors of medicine who attended the March, 1957, MCI in Detroit, 946 came from Detroit and Wayne County, the balance from outstate and outside of Michigan. After Detroit, Flint was next in line with an attendance of eighty; Ann Arbor was third with sixty-six; Lansing, fifty-three; Dearborn, thirty-nine; Pontiac, thirty-seven and Grand Rapids, twenty-eight. Seventy-three other Michigan cities sent two or more physicians to the Institute. Eighty-seven communities sent one doctor of medicine.

Of the ninety-one "foreign" doctors, Canada sent thirty-seven and Ohio, twenty-three. Five came from California and one from Arizona!

Attendance by specialties put the general practitioner in the lead with a total of 486, followed by 231 surgeons and 216 internists. The obstetricians and pediatricians tied with ninety each. A total of 238 residents and interns were present to attend their own conference, one of the many "side shows" of the annual Michigan Clinical Institute.

INTERNATIONAL COLLEGE OF SURGEONS ANNOUNCES AWARDS IN OBSTETRICS AND GYNECOLOGY

The Division of Obstetrics and Gynecology of the United States Section, International College of Surgeons, announced that two awards will be made for the best manuscripts not exceeding 5,000 words submitted by December 1, 1957. The first prize will be \$500 and the second \$300.

Contestants must hold the degree of Doctor of Medicine from an accredited college of medicine, and (1) be interns, residents or graduate students in obstetrics and gynecology, or (2) be teachers of obstetrics and gynecology. Fellows of the College are not eligible.

The two successful candidates will be asked to participate in the scientific program of the Division of Obstetrics and Gynecology at the 1958 annual congress of the United States and Canadian Sections, International College of Surgeons.

Details of the contest and the forms in which

the manuscript must be submitted may be obtained by writing Dr. Harvey A. Gollin, secretary of the Committee on Prizes, 55 East Washington Street, Chicago 2, Illinois.

"The purpose of this contest is to advance the art and science of obstetrics and gynecology, in accord with the principles of the International College of Surgeons and with the aims of the College to extend the frontiers and elevate the standards of all branches of surgery," Dr. Raymond J. Pieri of Syracuse, N. Y., chairman of the Committee on Prizes, said.

WHAT'S IT WORTH TO YOU?

What's it worth to you?

You are a member of a profession that for centuries has been considered a very privileged one. Why? Our profession is one of "Service."

This profession differs from the so-called "Trade" in that the latter is for profit first and foremost to the individual or the concern for which he labors, while the former is for the welfare of the patient first with profit as a secondary consideration.

This concept practiced under the social order of free enterprise has been an American heritage handed to us to enjoy by our many colleagues who have practiced the profession before us. We must preserve it for the generations who are to follow.

In the late thirties and early forties when socialized medicine conceived by our government was about to change our way of life, our delegates in the Michigan State Medical Society came forward with the Blue Shield Program that preserved the doctor-patient relationship.

Today, we are threatened again, not by government but by the Community Health Association. The C.H.A. has already begun to function in the Eastern part of our State. C.H.A. feels that a greater scope of medical care can be given for less money to the subscriber than our own Blue Shield Program can offer.

If this is true, then it is up to us to re-evaluate our program and do something about it. We must examine our own conscience first. Have some of us taken advantage of our Blue Shield Program? Have we been honest with our subscriber or at times have we made our bills higher than our own Blue Shield allowed and billed the patient an extra sum?

Either we police ourselves and co-operate with whatever program our State Medical Society adopts or else stand the chance of private interests taking over our profession.

President Eisenhower not too long ago stated that "the price of peace comes high."

We may have to make concessions, we may have to accept lesser remuneration for our labors, but what's it worth to you to keep the practice of medicine a free enterprise?—E. J. LAURETTI, M.D., in President's Message, *The Bulletin, Muskegon County Medical Society*, March, 1957.

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Michigan Blue Shield Report

One of the most important problems the medical profession faces today is "Where Do We Go from Here in Prepaid Medical Care"? There is a steadily growing public demand for broader benefits under prepayment than are currently provided under the Michigan Blue Shield Plan.

There are a variety of so-called Comprehensive Health Care Plans in operation to a growing degree in various parts of the country.

So important has the problem become, in the opinion of your leaders in the Michigan State Medical Society, that a special meeting of the House of Delegates was held in the Blue Cross-Blue Shield Building on April 27, 1957. The day-long session covered every phase of the prepayment picture, including full reports on the half-dozen more widely publicized programs now providing to varying degrees comprehensive pre-

paid medical care and a detailed report on how Michigan Blue Shield can meet the challenge of this demand for broader prepayment programs.

What was reported, what was said in this day-long meeting is of vital importance to every doctor of medicine in Michigan. Naturally, it is an impossible task to reproduce in print verbatim every word—important though they were. However, the following pages are an inclusive summary of all that went on at the session. We make it the basis for our yearly report on Michigan Blue Shield in this June issue of *THE JOURNAL* because we feel it is material that every doctor in Michigan should know and understand.

This report follows the chronology of the meeting itself. That pattern was "How We Got Where We Are," "Current Attempts to Solve the Problem," "Where Do We Go with Prepayment?" and "What Road Shall We Follow?"

How We Got Where We Are

(Condensation containing the highlights of the presentation made by L. Fernald Foster, M.D., Secretary of MSMS and President of Michigan Medical Service.)

Before we consider "How We Got Where We Are," I think we need a clear, short definition of exactly "where we are." It couldn't be much shorter or much clearer; *we are still in the position of practicing medicine as a free enterprise as we have all known it.*

Therefore, the title probably should be "How We Have Stayed Where We Are." And the subject involves consideration of certain factors operative in the last twenty years that have preserved our status.

It became apparent in the late twenties that the

costs of medical care were rising rapidly. The Michigan State Medical Society was aware that this was a problem probably as early as anybody in the field of health. Reason, of course, for the increase in medical costs was the rapidly developing tempo of medical science. Your State Medical Society, through its Council and Executive Committee, was among the first to conduct research studies in the costs of medical care. This involved, as some of you will recall, sending a delegation to Europe to study the plans in England. This and other similar studies led to development of a

device based on the insurance principle which many of you have probably forgotten. It was called "Mutual Health Service" and was a voluntary plan quite like our present "Michigan Medical Service." However, it was never put in operation because of certain economic conditions existing at the time.

However, by the early thirties there developed in this country a new social and political philosophy. Many of us are still around who were active in the research studies and the activities that finally led to the medical prepayment program—our own program—Michigan Medical Service. But there are as many or more younger men to whom all of this is a matter of hearsay. This history will help refresh the memories of those who had an active part in the development of Michigan Medical Service and present the facts to those who have entered the medical profession since.

Need For Action

The new social and economic philosophy that emerged in the early thirties was a philosophy based on paternalism, and it was evident that it lent itself readily to the institution of a new type of medical practice—one that would fit into this new political and social philosophy. It was perfectly evident at the time that something should be developed by the medical profession to preserve the private practice of medicine, with all the attributes to which we have pointed so often: wholesome competition, unrestricted initiative, and maintenance of the patient-physician relationship.

The Council set about developing some such procedure. It seemed logical that the source of such a development was the insurance industry. This may have seemed logical, but it didn't work. The insurance industry flatly refused to have any part of such a development because it lacked actuarial data and specific information that it said was necessary to develop plans, contracts, fees and so forth. This left your Council with but two alternatives: to develop on their own some sort of prepayment insurance device or succumb to the then actively developing programs in Congress. The Council chose the first alternative on the theory that if they should lose, at least they would lose trying and not lose by default. They set about developing what is now Michigan Medical Service.

The Council have only two commodities with which to work in the development of this device.

One was participation of nearly 90 per cent of the doctors in Michigan, and the second was the will and determination to solve this rapidly growing economic problem. It was done by the trial and error technique—a most cumbersome and inefficient way—but the only one at their disposal. What emerged was Michigan Medical Service.

Many of you will recall that MMS, in its early stages—which was pure trial and error—many times found itself in bad shape. At the outset everything was guess-work, and one cannot always guess right. However, as time went on, statistical information and actuarial data were compiled. Michigan Medical Service emerged from the woods and, from that point on, has operated on a sound actuarial basis.

Set Pace

Incidentally, in this connection, it should be pointed out that the actuarial statistics developed by Michigan Medical Service were then utilized by the commercial insurance companies in entering the prepaid medical care field and helping them make the contribution they have since made. They have frankly said that when they did enter the field, it was because they had then acquired the actuarial data that were definitely developed by the Michigan State Medical Society in its program.

We are the first to admit that Michigan Medical Service is not perfect, but we do believe, as a number of us have said a good many times, that for seventeen years it has saved the medical profession from the institution of a government program of compulsion. It has provided a more democratic, voluntary program instituted and controlled by the medical profession itself. But the most important thing it has done, I believe, is to have served the public better. What it did for the medical profession I feel should better be considered a secondary result. Net result is that for seventeen years it has served an important, vital dual purpose.

Probably this device in its present form is not now adequate to meet completely the new problems that are arising due to our changing economics. That, I believe, is why this House of Delegates has been called into session: to determine what, if any, changes should be made in the device or whatever device is utilized to solve the problems of 1957.

Important Points

There are certain points I would like to emphasize. First is the fact that Michigan Medical Service is not an insurance company. It was developed on the basis that if the medical profession were to indulge in this activity, it should stay within its prerogatives, and for that reason it was developed on the basis of a *service* plan.

As you know, only the medical profession is in a position to render *medical service*. A commercial insurance company cannot give medical service; all it can give is dollars.

All that the medical profession can give in any program is service; it has no funds to give money, so therein lies the difference between a service plan and an insurance company. The question has been raised many times whether, if the present device operated by the State Medical Society were to become an insurance company, the medical profession had any prerogative to be in the insurance business. The medical profession, from time to time, has decried the fact that corporations practice medicine. So one might well imagine that *if we became an insurance company*, the insurance companies could say: "What right have doctors of medicine to be operating an insurance company any more than a corporation has to be operating in the field of medical care?"

Michigan Blue Shield, as now constituted, is the Michigan State Medical Society. Its corporation is the House of Delegates, elected democratically by the component county units. The corporate body elects the directors, 75 per cent of which are practicing doctors of medicine. They determine the policies based on their knowledge of private practice, as we understand it. The development of Michigan Medical Service, as previously mentioned, for more than seventeen years has served the purpose of giving the people a better service at a price they could afford to pay and at the same time preserving the private practice of medicine as a free enterprise.

Had The Council failed in 1939, when this was developed, those of you who have come into the practice of medicine since that time might never have known what the private practice of medicine was. You probably would have been practicing under some scheme of compulsion. We believe that the development of Michigan Medical Service has not only prevented the medical profession from having been invaded by governmental agen-

cies, but by other agencies as well. Aside from governmental agencies, there are other groups and forces at work—particularly at present. There is pressure from the commercial insurance companies and from various pressure groups. It doesn't make much difference, I believe, whether it is the Government, or private agencies, or pressure groups: if *any* of them succeed in directing the practice of medicine, then we shall have lost a heritage that we believe has been preserved for us and has brought us to the point where we are.

Responsibility

The responsibility of the Michigan State Medical Society and its prepayment plan—Michigan Medical Service—is to preserve the overall private practice of medicine. Michigan Medical Service is the device, I am convinced, that has made this possible during the last seventeen years. I believe we must realize there is only one banner under which we all can rally—specialists, staff members, county medical societies and rugged individualists. That is the banner given you by your Doctor of Medicine degree and the fundamental units of organized medicine. I think your Council believes that its primary responsibility is to preserve the overall practice of medicine. To do that means that the problems arising from groups within the profession have to be handled equitably, but within the realm of being realistic and keeping Michigan Medical Service—Medicine's Plan—actuarially sound.

Too often, I think, the most significant factor about the Blue Shield program that is overlooked is its acceptance by the people of Michigan and the country. Without doubt, the representatives of Michigan Medical Service have done an excellent job in presenting the Blue Shield plan. But it is not because of super salesmanship by these representatives that the Blue Shield Plans have grown so vigorously. It is because the people have wanted the service and protection they afford.

A Partnership

It is a partnership proposition entered into between the patient and his doctor. Nothing must be done which will disturb or negate that relationship because the success of the entire voluntary movement is based upon it. The interposition of any party between the patient and the doctor is an anathema to both for socio-economic and scientific reasons.

We who have the continuing responsibility for the administration of our own Blue Shield program face the task of giving all of the patients what they want and are willing to pay for within the basic philosophy of the Plan. But we are not responsible for acceding to the wishes of pressure groups, nor of solving solely by this machinery all

of the social and medical problems involved in the care and treatment of the healthy and the sick. To attempt this would be to accept a responsibility not intended by the Michigan Medical Service charter, nor possible within the scope of its financial assets.

Current Attempts to Solve the Problem

(A report on representative types of prepayment programs made by Arch Walls, M.D., President of the Michigan State Medical Society; Donald Thorup, M.D., Delegate, Berrien County Medical Society; and Max L. Lichter, M.D., Delegate, Wayne County Medical Society.)

The seven plans outlined are prototypes of the various approaches to prepaid medical care. There are, of course, many other plans in each area, far too many to present in detail. However, these seven incorporate the salient features in each general area of approach.

They are classed as follows:

- I. Plans controlled by medical societies
 - A. Michigan Blue Shield (1)
 - B. Windsor (Ont.) Medical Service (2)
- II. Plans *not* controlled by medical societies
 - A. Indemnity programs
 1. Commercial Insurance (3)
 2. Deductible or Co-insurance (4)
 - B. Group or Closed Panel Plans
 1. Health Plan of Kaiser Foundation (5)
 2. Health Insurance Plan of New York (HIP) (6)
 3. Community Health Association (CHA) (7)

Each of these plans is outlined under the headings of what the plan covers, how the physician functions under the plan, how he is paid and how much the program costs the patient.

Michigan Blue Shield

- I. Services Covered:
 - A. Hospitalization through Michigan Blue Cross (120 days on group coverage).
 - B. In-hospital surgical care, payment according to benefit schedule.
 - C. In-hospital medical care, payment according to benefit schedule.
 - D. In-patient x-rays, limit of \$15 per admission, according to benefit schedule.
 - E. Anesthesia by physicians—payment on basis of time, according to benefit schedule.
 - F. Limited office surgical care.
 - G. Maternity—delivery only—flat fee according to benefit schedule.
 - H. Emergency first aid treatment and x-ray, according to benefit schedule.
 - I. Under supplemental rider, x-rays and EKG'S supplemental to basic benefits and unlimited as to number, paid in accordance with benefit schedule.
- II. Physician's Function with Plan
 - A. Plan controlled by Michigan State Medical Society.

1. Members of the House of Delegates of MSMS are members of the Corporation.
2. Has a thirty-three-member Board of Directors. Two-thirds must be M.D.'s. Six represent the Michigan Hospital Association and five represent the general public. All board members are elected by Members of the Corporation.
- B. Physicians are paid by Blue Shield on a fee-for-service basis.
 1. Two schedules of benefits offered—both of which were developed by MSMS and adopted by the Plan's Board of Directors. (Fees paid to general practitioners and specialists are the same.) They are considered as average fees for average cases.
 - a. \$2,500 Family Income Limit Plan (\$2,000 if single).
 - b. \$5,000 Family Income Limit Plan (\$3,750 if single).
 2. Participating physicians guarantee that fees for contract benefits paid by plan are full payment for persons with incomes less than income limit of their contracts.
 3. Plan uses Advisory Boards from County Medical Societies to recommend individual fees for specific cases that are outside the category of routine.
- C. Physician works as a private practitioner on fee-for-service basis. He reserves the right to select patients he wishes to care for. His participation in the Plan is optional. He may resign as an individual from participation without penalty.
- D. Plan pays physician directly in all cases.

III. Plan's Current Cost to Patient*

- A. Group \$2,500 Family Plan for medical-surgical care is \$3.25 per month plus \$8.54 for comprehensive Blue Cross hospital coverage, semi-private room service.
- B. Group \$5,000 Family Plan for medical-surgical care is \$4.50 per month, plus \$8.54 for comprehensive Blue Cross hospital coverage, semi-private room service.
- C. Plan employs principle of community rating.
 1. All groups regardless of size, type of employment, nature of work, age grouping or race are charged the same rates for the same coverage.
 2. Group contracts do not exclude pre-existing or chronic conditions.

*Supplemental x-ray-EKG coverage and extension of days of care to 365 under hospital medical-surgical contracts are available to qualified groups at additional cost.

3. Deductibles and/or co-insurance are not written-in features of any of the Plan's surgical or medical-surgical contracts.
4. Conversion privileges to individual status are available to group subscribers when employment is terminated.
5. Provision is made to cover retired workers for the same benefits at the same rates as the active group when formal retired group program exists.

Windsor Medical Service

- I. Services Covered:
 - A. Hospitalization through Ontario Blue Cross.
 - B. In-hospital surgical care.
 - C. Office surgical care.
 - D. Maternity care (\$50 delivery plus prenatal and postnatal care, at so much per visit).
 - E. Medical anesthesia—payment by time.
 - F. X-ray—diagnostic and therapeutic—no maximum.
 - G. BMR, EKG, refractions, annual medical examination as out-patient.
 - H. In-hospital medical—no limit on number of visits except as determined on each individual case by Medical Director.
 - I. Consultation, with prior authorization by Plan.
 - J. Shock treatments.
 - K. Diagnostic hospital admissions.
 - L. Home and office calls.
 - M. Waiting periods for tonsillectomies and appendectomies, hernias, gynecological cases, obstetrical cases and refractions.
- II. Physician's Function with Plan
 - A. Controlled by Essex and Kent County Medical Societies.
 - B. Board of Directors consists of ten members: seven M.D.'s and three lay people.
 - C. Free choice of physician and fee-for-service based upon a schedule.
 - D. Plan pays about 90 per cent of schedule, when pro ration of income is adjusted to services.
 - E. Plan fee schedule is about 89 per cent of Michigan Blue Shield \$5,000 plan.
 - F. Specialists are paid higher fees for consultation than general practitioners.
 - G. Non-participating physicians are not paid by Plan. Payments made to subscribers in these instances.
 - H. Medical Director adjudicates all disputes between subscribers and Plan and doctors and Plan—decision is usually final—can appeal to a special committee who report to the Board.
 - I. Medical Director reserves right to determine adequate amount of medical care and Plan pays accordingly—doctor can't charge extra to patient if Plan reduces allowances and patient is under income.
 - J. The Plan polices itself through its Board and Committees. Reports are that this effectively reduces over-utilization and helps to stabilize rates to subscribers.
 - K. Plan may cancel participation of M.D.
 - L. Plan is full service for families under \$6,500 incomes—usually accepted for everyone.
 - M. 35 to 40 per cent of plan benefits are rendered outside hospital.
- III. Plan's Cost to Patient
 - A. Group plan for a family . . . \$7.90 per month, plus \$6.30 for Ontario Blue Cross hospital coverage under comprehensive contract.
 - B. Individual plan for a family . . . \$8.50 per month, plus \$5.90 for Ontario Blue Cross hospital coverage under a non-group contract.
 - C. Plan employs principle of community rating.
 - D. Plan does not use deductibles or co-insurance.

Commercial Insurance Contracts

- I. Services Covered:
 - A. Hospital insurance, usually on basis of fixed amounts for room and extra services.
 - B. In-hospital medical care per schedules.
 - C. Office and hospital surgical care (including O.B. delivery) per schedules.
 - D. Emergency accident care (includes out-patient).
 - E. Home and office calls—with and without deductibles.
 - F. Out-patient diagnostic services on a deductible basis or maximum per year allowances. (No schedule on x-rays)
 - G. Dread disease riders up to \$5,000 or \$10,000.
 - H. Major medical coverage—usually inclusive of all charges for hospital, medical, drugs and appliances with deductibles and co-insurance. (No schedule of fees)
- II. Physician's Function with Carrier
 - A. Physicians are totally unassociated with insurance plans and have no voice in policy decisions covering payments for medical care.
 - B. Insurance plans controlled by stockholders and lay Corporation Boards of Directors.
 - C. Physician is paid on fee-for-service from the insured member. Insured member looks to insurance company for claim. Payment, unless assigned to doctor, is made to patient.
 - D. Each insurance company has a wide variety of fee schedules which it sells to insurance consumer. Usually, the one selected is determined by its price to the insured. Fee schedules range from \$100 schedules to \$150, \$200, \$225, \$250, \$300, \$350, \$400 and so on.
 - E. Insurance plans do not seek fee recommendations from the Michigan State Medical Society nor do they have County Society fee adjudication Boards to assist them in the determination of fees for unusual and complicated procedures.
 - F. Physician reserves the right to choose his patients.
 - G. Insurance plans generally will get together any kind of a plan desired by a group—but on an indemnity basis and scaled to fit a predetermined premium charge.
- III. Cost of Insurance Plans to Patient
 - A. Cost varies with level of benefits selected by insured.
 - B. Cost of group contracts is determined by group utilization since insurance plans use the principle of risk selection and experience rating, applied to individual groups.
 - C. Cost of group contracts is also influenced by type of employment and age grouping.
 - D. Usually, conversion from a group status to an individual status upon termination of employment is not offered.
 - E. Seldom offers same coverage at same rates to retired workers as are available to active employees.
 - F. Many groups of employees are considered undesirable by insurance companies and are dropped or never written by them.

General Electric Comprehensive Medical Expense Program

- I. Services Covered
 - A. Is part of an insurance program providing Life Insurance, Accidental Death or Dismemberment Insurance for employees, Weekly Sickness and Accident Insurance for employees, Comprehensive Medical Expense for employees and dependents, and Maternity Benefits for female employees and dependent wives.
 - B. There are two classes of expenses:
 1. Type A. covers Hospital room and board,

special hospital services required for medical or surgical care; operating rooms, drugs, dressings and blood transfusions; anesthetics; surgical fees; diagnostic x-rays; infant care. In any one calendar year, first \$25.00 is paid by employee and the next \$225.00 is paid by Plan. For additional expense, employee pays 15 per cent and Plan pays 85 per cent.

2. Type B. Covers services of physicians, including specialists, other than for surgery; diagnostic laboratory work, x-ray and radium treatment, oxygen therapy and blood transfusions not covered under Type A. It also covers services of most registered graduate nurses; drugs and medicines requiring prescription and rental of such equipment as iron lung and artificial limbs.

In any one calendar year, first \$50.00 is paid by employee. After that, employee pays 25 per cent and Plan pays 75 per cent.

3. Combined maximum benefits for Type A. and Type B: expenses for each covered individual—\$15,000 in total with maximum of \$7,500 in any one calendar year.
4. Benefits determined separately for each individual. Employee pays no more than first \$50 for any combination of both Type A and B expenses for any one calendar year.
5. Benefits for semi-private hospital accommodations are provided without dollar limit.
6. Maternity Benefit (in lieu of *all other* benefits):

Normal Delivery	\$150
Caesarean	225
Miscarriage—up to	75

For severe complications of pregnancy or resulting from childbirth, Plan pays 75 per cent of amount exceeding \$150 (paid by employee) up to \$5,000 for any one pregnancy.

7. Psychiatric treatment out of hospital will be paid by Plan up to 50 per cent. If in hospital, benefits will be paid on basis of Type A and Type B.

II. Physician's Function under Plan

A. Organizational structure

1. Through Metropolitan Life Insurance Company. In effect until October 1, 1960.
2. Care is furnished through regular private practice channels. Patient has complete free choice.

B. How physician is paid.

1. Is paid his usual fee for service rendered subject to deductible and co-insurance provisions of Type A, Type B and Maternity Benefits coverage.
2. Collects employee's portion of fee directly, and Plan's portion from insurance carrier.
3. There is no fee schedule. Benefits are based upon fees which are "reasonable, necessary and customary."

C. How he works under Plan.

1. Physician's co-operation is essential to success of Plan. Must guard against taking unfair advantage of the insurance program. As Elmer Hess has said: "Insurance per se—does not create new wealth and . . . is no justification for increasing an otherwise reasonable fee for a professional service."
2. Physician renders his service upon usual basis of private practice. Necessary consultations are permitted. Surgical assistants are paid. Services can be rendered in the hospital, in the office, at home—wherever physician feels patient will receive best care.

III. Cost to Employee

A. Is based upon whole Insurance Plan.

1. For employee alone 0.9 per cent of normal annual straight time earnings.
2. Comprehensive Medical Expense Insurance and Maternity Benefits for dependents, additional 2.0 per cent of normal straight time earnings.
3. Example: Employee earns \$6,000 per year straight time wages. Cost of Plan: Individual Employee, \$54.00; Employee and dependents, \$174.00. This is for entire package.
4. Balance of cost paid by General Electric.

Health Plan of Kaiser Foundation

I. Services Covered

- A. Diagnosis and treatment (surgical and medical) in hospital and home and office, by specialists, with no limits on number of visits, physical checkups, pediatric care, eye examination for glasses.
- B. Dependents pay one half of x-ray and laboratory fee in most contracts.
- C. Tonsillectomy \$15 extra for subscriber to \$35 extra for dependents.
- D. 111 days hospitalization for subscriber; sixty days for dependent, with additional fifty-one days at one half private rate.
- E. \$1.00 for each office visit. \$3.50 and \$5.00 house call charge, depending on time of day.
- F. Obstetrics \$60 for subscriber; \$95 for dependent after ten months' membership.
- G. Pre-existing conditions covered at one half private rate in most groups.
- H. Drugs and appliances not furnished.
- I. Free choice of physician within group.
- J. Special provision for care outside service area.

II. Physician's Function under Plan

A. Organizational structure

1. Kaiser Foundation.
2. Kaiser Health Plan (is regional) contracts with doctors and hospitals for services on behalf of its subscribers.
3. Kaiser Foundation Hospitals own all hospitals and clinic buildings and rent space to doctors.
4. Permanente Medical Group in Bay Area has 300 physicians, about seventy of whom are partners and balance are salaried.

B. How physician is paid.

1. Group is paid a capitation fee by Plan. Extra charges to member as well as fees from private patients accrue to Kaiser Foundation Group.
2. Physician is employed initially on salary basis. After three years of satisfactory service he may become a participant in group. After an additional two years, he may purchase a partnership in Group. Income depends upon senior status and degree of responsibility.

C. How physician works.

1. Group divided into specialty services in each facility, each headed by a chief. Intra and inter service consultation is encouraged. Practically no general practitioners are employed.
2. Work five and one half days a week, seeing patients in own service by appointment. All administrative details handled by ancillary assistants.
3. Junior members rotate house calls, night and emergency coverage.
4. Vacation periods, educational privileges, sick benefits depend upon physician's status with group.

III. Cost to Patient

- A. Depends upon class of coverage. Examples based upon family unit: Group—Same benefit for subscriber and dependents—\$14.00 per month; Group—Subscriber benefit and usual dependent—\$11.40 per month.
- B. Groups pay \$2.00 registration fee.
- C. Approximately 600,000 members.

Health Insurance Plan (HIP)

I. Services Covered

- A. Complete care including home, office and hospital by general practitioners and specialists.
- B. Out-patient diagnostic and laboratory procedures.
- C. Eye examinations, visiting nurse service, periodic health examinations, immunizations.
- D. House calls at patient's request between 10:00 p.m. and 7:00 a.m. at extra charge of \$2.00. This is the only extra.
- E. Free choice of group and then of physician within group.

II. Physician's Function under Plan

- A. Organizational structure
 - 1. A central "headquarters" which collects dues, disburses to physician groups, sets standards for initiation of groups and maintenance of standards of medical care, develops appropriate statistics, develops system of patient records and maintains their completion and collection, initiates subscriber as well as physician educational programs relative to the plan; conducts surveys concerning utilization and quality of medical care furnished members; administers a pension fund set up for physicians.
 - 2. Physicians form autonomous medical groups and approach plan for participation. Must conform both in composition and physical facilities to criteria laid down by plan. Groups are partnerships with additional physicians on a salary basis. Limited, infrequently used specialties paid on a fee basis through a special fund contributed to by all groups. Groups must finance own building and equipment. Criteria, in addition to basic, further depend upon number of persons group contemplates caring for. All groups responsible to central office through a fifteen-member Medical Control Board, a policy-establishing mechanism.
- B. How physician is paid.
 - 1. Group receives annual per capita fee of \$31.20 (at present) for each member who elects to use group.
 - 2. After administrative and operating expenses are paid, as well as salaries, collected funds are apportioned to group partners on basis of responsibility, training and seniority.
- C. How physician works under plan.
 - 1. Almost all physicians work in Center part-time. Most have own private office for private practice but even here many will see HIP members.
 - 2. As far as possible, each patient is first seen by a general practitioner (who represents about 40 per cent of the 1,100 men in the plan) who serves as the personal physician and who acts as the referral agent and is responsible for follow-up of treatment as well as patient's compliance with consultative referrals.
 - 3. House calls rotated through partners of group with main responsibility falling on general practitioners.
 - 4. Patients are seen by appointment with phy-

sician of choice. New patients are assigned on rotation. Provision for emergencies and drop-ins.

- 5. Non-members seen at Center with fees based upon a schedule and accruing to group. Part-time physicians (even partners) conduct private practice in own separate office.
- 6. Hospital care is given at hospital of which physician is a staff member or where he has privileges.
- 7. Group contracts with central office to furnish agreed medical services to members.

III. Cost to Patient

- A. Standard plan, designed for individuals with base salary of not more than \$6,000 or families with income of not more than \$7,500, has monthly cost of \$3.56 for individual; \$7.56 for couple, and \$10.68 for family. At least one-half must be paid by employer.
- B. Subscriber earning more than in standard plan pays 20 per cent more.
- C. Usual enrollment is group of ten or more subscribers, though recently individual enrollment in apartments or housing projects has been undertaken.
- D. All subscribers must carry own hospital insurance and it must be Associated Hospital Service (Blue Cross).

Community Health Association

No specific plan has been announced or published. All information relative to this plan should be regarded as hearsay although much probably represents what will prove to be definitive.

I. Services Covered

- A. Apparently the coverage will be comprehensive in home, office and hospital with diagnostic and laboratory service. There is no information concerning exclusions. There is no information concerning status of dependent coverage.
- B. Apparently plan is based upon combination of features of HIP and Kaiser Plan. At present, it is said that CHA does not contemplate building own hospitals.
- C. Apparently premium will include hospitalization. It may be that CHA will then negotiate for hospitalization directly with hospitals (though on what basis is presently not known) or will purchase hospitalization from Blue Cross.
- D. It is said that in beginning, CHA will start on a small scale experimental basis. One local union (for example) will be offered the plan. Within this group there will be further offered to the individual union member the choice of accepting CHA or continuing his present plan (or any modification thereof). It is said that this type of choice will always be a policy of the UAW-CIO. It is said that CHA eventually wishes to offer its plan to any member in the community.

II. Physician's Function under Plan.

- A. Organizational structure
 - 1. CHA will have a Board of Directors who will decide and control every aspect of the plan.
 - 2. There will be a CHA Medical Director, responsible solely to the Board. His responsibilities have not been announced.
 - 3. Apparently there will be "built-in mechanisms to make possible the rendering of high quality medical care." It may be that this will be accomplished (policy-wise) by the

- establishment of a Medical Advisory Committee (to the Board) built around a University Medical Center. This Committee, having no executive function, purportedly would be sensitive to trouble spots, advise on standards and policies, have no vested interest, and would eliminate local politics. It would screen all physicians having an integral role in the program.
4. Groups of physicians would be established to provide services of plan. There is no information concerning criteria for establishment of groups, financing of group facilities and equipment, minimum number of members a group must care for. However, it has been suggested to the Board that it is dangerous to permit groups to have total autonomy. Hence the group medical director, its executive officer, should have the title of Associate Medical Director of the plan.
- B. How the physician is paid.
1. No official pronouncement has been made. Best information at present is that all physicians will be on a salary, to be paid directly by the CHA.
 2. No information is available from any source concerning care of non-member (or private patients) and fees so derived.

- C. How the physician works.
 1. No details are available. It is presumed that the 40-hour week will provide the basis for working hours.
 2. All of the standard reasons for attracting physicians to this type of group practice have been mentioned at one time or another.
 3. Apparently the general practitioner will be "the cornerstone" of medical care, as advocated by HIP.
 - D. All physicians, presently having hospital staff appointments or privileges, will be expected to maintain them and utilize them for the members of the plan. Hospitals, apparently, will be expected to see that staff membership or privileges are not jeopardized by the physician's participation in a group under the CHA plan.
 - E. No information is available concerning the actual functioning of physicians within the plan or the groups. It would seem, however, that "the quality of medical care" furnished by each physician will be subject to constant scrutiny as well as periodic evaluation. What this is intended to mean is not clear, as yet.
- III. Cost to Patient.
- A. There is no information, or even faint hint, on this subject. It is thought, however, that costs will be competitive with existing plans of Blue Cross-Blue Shield and commercial insurance.

Where Do We Go with Prepayment?

(Report by Jay C. Ketchum, Executive Vice President of Michigan Medical Service.)

Michigan Medical Service (Blue Shield) now provides coverage for medical-surgical expense, according to its various contracts, to almost one-half of the people of Michigan, some three and one-half million. The benefits of coverage have been, with a few exceptions, limited to hospitalized cases. Little in the way of diagnostic services has been provided.

There has been voiced an increasing desire for extension of coverage into the diagnostic services without the requirement for hospitalization. Demands for extension of benefits to other than hospitalized cases are heard, not only from large numbers of subscribers but from many physicians as well. Certainly, restricting payments to services rendered to in-hospital bed patients does affect medical practice, particularly as to minor surgical and diagnostic procedures. Coverage for long periods of hospitalized illness, including convalescence, has been requested. In the main, but by no means exclusively, there have been requests for adjustment of our service income ceilings to more nearly reflect present economic conditions, voiced by the representatives of large organizations of our subscribers.

A spokesman for Labor, Dr. Morris Brand, last December in the *AFL-CIO News* stated Labor's aims in the field of prepayment for health care:

Dr. Brand stated that since Congress has not enacted legislation to set up a national insurance program—which most labor unions favor—unions have had to find other sources of health insurance coverage for their members, mainly Blue Cross-Blue Shield and commercial carriers.

However, Dr. Brand continued, since home and office care is rarely offered in these plans, some "labor groups have established direct service medical centers where services are actually provided rather than cash indemnities to cover part of the costs. The latter type of plan has proven more popular with members because there are no barriers to the service, preventive services are usually included in the benefits and there are no hidden bills cropping up after the services are rendered."

What Doctor Brand Thinks

In general, Dr. Brand believes that:

"The extent to which commonly available insurance programs meet a family's health needs is not too impressive to Labor." He says that indemnity payments

are "not a satisfactory method of paying for services and are a base upon which some physicians too frequently add substantial charges. Also the emphasis on hospital and surgical coverage as in the case of most plans without substantial out-patient benefits is frequently a cause for unnecessary hospitalization. Also, as a result of inadequate concern for operating efficiency in hospitals and an *unwillingness to enforce legitimate controls*, there are unjustified premium increases."

According to Dr. Brand, these are Labor's goals for better health plans:

1. Complete prepayment for medical care without co-insurance and deductible features and hidden added costs.
2. Comprehensive benefits—only if the range of health services is complete will the individual's health needs be effectively and economically met.
3. Rational organization of medical services—on the basis of group practice, and
4. *Control* of the quality of medical services which must be built into medical care plans.

Mr. Walter Reuther, in his President's Report to the UAW 16th Constitutional Convention, April, 1957, confirmed Dr. Brand's statement.

Efforts to develop a \$6,000 family income ceiling service contract have consumed so much time and, in relation to the fees proposed therefor, would require subscriber rates of such amount that we are led to believe the results would not be acceptable to the interested subscriber groups. The minimum benefits needed right now to satisfy the market seem to be approximately as follows:

Surgical services, in or out of the hospital
 Obstetrical services, in or out of the hospital
 Medical (non-surgical) services in the hospital
 Anesthesia services, in all surgical cases
 Diagnostic radiology, in or out of the hospital
 Therapeutic radiology, in or out of the hospital
 Physical therapy, in or out of the hospital
 EKG, BMR, EEG, EG, in or out of the hospital
 Pathological tissue examinations, in or out of the hospital

These services are to be limited only by the applicable scheduled fees.

Coverage for the services of consultants and surgical assistants is also desirable but presents difficult problems.

For Example

Extensions of benefits to those services performed outside of the hospital present unique

problems in that certain elements of control of utilization inherent in the hospitalized case are not present outside. Abusive or ill considered utilization of benefits can accumulatively increase subscriber dues to an unreasonable and perhaps unbearable degree. Conventional insurance methods toward control, such as deductibles and co-insurance, might provide a degree of control and reduction of subscriber dues. These methods, however, appear to be unacceptable in health care prepayment to the representatives speaking for many of our subscribers. It is extremely difficult, if not impossible to determine at what point a particular deductible amount or co-insurance percentage becomes not just inhibitive as to elective or abusive use, but in effect, prohibitive as to utilization of needed services. These representatives insist that control of abusive utilization must be assumed by the Profession and the hospital.

Deductibles and co-insurance would undoubtedly receive much more acceptance if the maximums contemplated by our service schedules were certain of acceptance. It seems obvious that assurance of acceptance of our schedules of fees can be given only if there is some arrangement for some form of policing of charges by the Profession. An experiment by Blue Shield in Wisconsin provides for payment of physicians' usual and reasonable charges. Fee schedules as such have been completely abandoned (in this experiment). However, the Medical Society has assumed the full burden of policing charges, even to entering into court cases as co-defendant with the patient against what are considered unreasonable charges.

The scope and nature of benefits provided by Blue Shield are not the only shortcomings complained of by our subscribers. Mostly, these are restrictions imposed upon Blue Shield by its relationship to, and the attitudes of, organized medicine. There is, for example, the difficulty the subscriber experiences in determining the participating or non-participating status of a particular physician. It seems unfair to our subscriber when we promise service benefits and then refuse to assist him in receiving the benefits. It is just as difficult to demonstrate to many of our participating physicians that there is any justification for participation when the non-participating physician contributes nothing to the success of the Plan but enjoys its advantages. It is equally difficult to explain our attitudes toward other practitioners,

such as dental surgeons, chiropodists and osteopaths, who legally render service covered by our contracts, who are willing to abide by our terms of participation, but who are not permitted that formal arrangement with Blue Shield.

Rejected

The concept of providing prepayment for only the very lowest income classes has been rejected by most of the public. Many persons and groups of persons are convinced of the propriety and value of prepayment regardless of incomes and are unable to understand why the Profession is unwilling to deal with all members of a group on a service basis.

The insurance companies in this field have underwritten coverages for large numbers of people. The coverage, quite similar to Blue Shield as to type and scope, is, of course, provided on the indemnification basis. The acceptability, to many groups, of the indemnity insurance is primarily based on price competition. It is standard practice in the health insurance industry to promulgate rates for a particular group of assureds in relation to the experience of that group. The result of this practice is that, based on price competition, much of the preferred (or so-called "cream") business is underwritten by insurance companies. Michigan Medical Service, being committed to provide the greatest good to the greatest number at a fair cost, utilizes what is commonly referred to as community rating; that is, for identical coverage identical rates are charged. This makes it possible for all, regardless of age, composition of group, race, occupation, etc., or experience within a segregated group, to enjoy protection at an average cost for all in the community in which Blue Shield operates.

The practice of experience rating, carried to its ultimate conclusion, can result in many of the people, the preferred risks, being removed, for rating purposes, from the total community (the total average). Thus, the remainder, being not so preferred, must bear a higher proportion of the total cost of coverages. This higher proportion of cost will, as it increases, become an effective prohibition to some, particularly the aged and lower income classes. When these can no longer afford to secure voluntary protection, they will look elsewhere, perhaps to Government, for a method. That the traditional insurance approach, based on a profit motive, has failed to restrain

Government intervention has been demonstrated in other lines of coverage. While not the only example, the necessity for states to establish Governmental controls, monopolistic funds, openly competing State operated underwriters and restraining laws in Workmen's Compensation, is illustrative.

Major Medical

A comparatively new form of health care coverage, the so-called "Major Medical" contract, is receiving considerable acclaim in insurance circles, as the answer to Blue Cross-Blue Shield competition. This form provides, subject to a deductible provision from \$100 to \$500 but sometimes as low as \$25, and co-insurance above the deductible at 20 or 25 per cent but sometimes as low as 10 per cent, on almost all types of care of a patient, including hospitalization, physician, surgeon, drugs, appliances, convalescence, private duty nursing, et cetera, at home, doctor's office, et cetera. The only other limitation of any concern is related to time, during a period of one, two, three years or even longer, for a total aggregate cost unallocated as to type of benefit, of \$5,000, \$10,000 or even \$25,000. In one case, of which we know, there is no time limit and no dollar limit. This, at first glance, seems to have a great deal of merit. However, students of the problems of the total population concerned with the final effect on medicine are aware of grave danger. Remember that the aggregate maximum amounts are not allocated and no limit is placed on any one item. The individual charges by individual doctors, hospitals, nurses, are expected to be reasonable. It is unlikely that there will be many flagrant abuses (although some have been reported) of the open-end provisions as to fees or charges. The real danger in Major Medical lies in the possibility and probability (already well documented) of a gradual but none-the-less appreciable and consistent increase in charges for each service, simply because of the existence of the insurance. It is just not realistic to expect individual doctors to resist such temptation. Such increase, accumulated, in the costs for each unit of millions of services, can ultimately effectively raise the cost of medical care to the point of creating the demand for intervention, the very thing medicine has hoped to avoid by reliance upon insurance.

Demonstrating that informed representatives of

our largest groups of subscribers are aware of the dangers, there is, among many examples, the evaluation of "Major Medical Expense Insurance" by Jerome Pollack, of the UAW-CIO Department of Social Security. He says: "The insurance is without valid controls to prevent an unwarranted inflation in health service costs." His entire statement of conclusion is extremely informative and should be referred to.

Closed Panels

The closed panel practice prepayment schemes, of which we have varying degrees of intelligence, consist of mechanisms whereby groups of professional persons are brought together under a single management to provide services for certain eligible people or groups of people. The arrangements between the management and the professional personnel may vary from salaried to per-capita (or capitation); may be full or part time; equipment and facilities may be furnished by management or the professional individual. Control and status may be determined by professional personnel, by management and professional representation or exclusively by management. These groups may provide limited type and scope of benefit or up to almost all inclusive services. They may or may not require some payment at time of service in addition to prepayment dues. Much can be said of the advantages and disadvantages of these schemes both from the professional as well as from the patients' point of view. There may be much to be said of the effect on the quality of medical care, on the patient-physician relationship, on the earnings of the physicians and the freedom to practice. Voicing my opinions in this matter would help you but slightly, if at all, unless you have an adequate knowledge of your own on which to base judgment and after all, it is really the concern of the physicians, individually and collectively.

There are plenty of examples of Government's intervention into the provision of personal medical care. The most recent and dramatic example is "Medicare," the program for provision of care for dependents of servicemen. This program, administered in Michigan by Blue Cross and Blue Shield, was adopted after long study by many interests, including your American Medical Association. It can be said that the program, as finally instituted, was not what organized medicine would have preferred but constituted the best

compromise possible. Effective July 1, this year, the Government, by grants in aid to States, will assume further obligations for medical care, by virtue of the Welfare Act of 1956, for four more categories of its citizens. Under consideration in the present Congress, is a proposal for the Government to provide certain health care benefits to the beneficiaries of OASI. Over the years, many of the provisions of the original Wagner-Murray-Dingell Bill, have been enacted into law, leaving compulsory health insurance as almost the only phase still to be realized by its proponents.

Medicine's Decision

Failure of voluntary means for providing health care can only result in compulsory methods being employed. The people have been told that voluntary methods can provide the answers. The voluntary plans have shown great ability so far and have led the people to expect more and better results. If the medical profession wants Blue Shield as its method in preference to other alternative attempts, and, if Blue Shield is inadequate for current needs and requires change or expansion to make it adequate, then Blue Shield can do the job, but—it can do only what the Profession wills it do; it can be only what Medicine wants it to be. Blue Shield in Michigan is Medicine's responsibility and will work as well as, and only as well as your cooperation will permit.

Only if the medical profession is convinced of the value of the service benefit approach, under the control of Medicine, on a fee-for-service basis, with free choice of physician; convinced that this is the most acceptable device; convinced of the necessity of a workable plan as an alternative to the various other schemes in existence and potential; only if the Profession is willing to do what is necessary to make its Plan work should you continue to sponsor, direct and concern yourselves with Michigan Medical Service. If you are convinced of these things, then you must take an active part, acquire the necessary intelligence, make decisions and be willing to support with a united effort.

The Medical Profession must speak as one, direct as one, and act as one. It is not sufficient that the Profession express itself critically and with many voices. We shall be unable to satisfy completely fifty-four county medical societies and eighteen or nineteen different specialty groups

with oftentimes opposing views. Members of the profession must communicate with all segments, all the many specialty groups, all the components, all the individual physicians. They must consider all the different interests, evaluate all the special problems. They must agree, compromise and reach decision. They must then direct and support united action in behalf of all the profession. The only banner about which all of Medicine can rally is that of its parent Society—first, the AMA; second, the state societies; third, the county societies—and then the specialty groups. Dr. Austin Smith, Editor of *The Journal of the AMA* at Lansing on March 6 of this year, made a strong plea for all doctors and all segments of medicine to resolve their differences and join hands in a

united front to prevent the catastrophe that has overwhelmed the profession in many other countries.

Dr. Dwight Murray, in his presidential address to the AMA at Seattle, last fall, warned:

"No nation can merely reap the benefits of freedom; it must also sow the seeds of freedom. In medicine the situation is the same. If an apathetic profession takes its freedom for granted, it will be the beginning of the end. . . ."

"The day has come, gentlemen, when we can no longer look upon medical economics and social changes merely as issues to be considered during our limited leisure hours. . . . We must now pay daily attention to these matters. . . . They must be a vital part of our life."

What Road Shall We Follow?

(Condensation containing the highlights of the presentation made by George W. Slagle, M.D.,
President-Elect of MSMS)

The previous speakers have outlined the story of prepayment. We have heard the story of Blue Shield, of private carriers, of closed panel plans and of projected union plans. The facts of life, insofar as these problems are concerned, have been placed before you.

This leads us to a forking in the road. Which road do we want to follow? Do we want to adjust our thinking and planning of Blue Shield to present day needs and make it even more successful than in the past, or do we want to disregard the warning clouds on the horizon and lose our plan—the doctor's plan—by default? As has been stated many times today, Michigan Medical Service is the fiscal agent for MSMS; you as Delegates are its "stockholders" and elect its Board of Directors. Each of us through you, as our Delegates, has a personal interest and responsibility in the future of our Blue Shield.

Now, if you will permit me to assume that the huge majority of the members of MSMS, which I believe to be true, want MMS to be continued and to be broadened in scope and coverage, then I would like to present to you the thinking of many of your confreres and duly elected representatives.

Improved Lines of Communication

It is readily agreed by those close to the problem that the lagging enthusiasm on the part of many physicians in Blue Shield involves a breakdown in communication. The rapid growth of the Blue Shield Plans has created a problem in maintaining a constant flow of information to the participating doctor. At this point, I might ask the question, "Why the lack of 100 per cent active physician participation?" A combination of factors has probably been responsible. For example, general prosperity has eliminated the need for assurance of his fees, and in some physicians' thinking it has eliminated even the need for pre-paid health insurance. The false notion that a third party is dictating his fees is probably another factor.

Through the years, the Plans have risen to the demands of the public, and without adequate explanation to the participating physician, have given the appearance of encroachment on his individuality and the free practice of medicine. We must let it be known that Blue Shield earnestly and sincerely wants, needs and welcomes constructive criticism and suggestions from physicians and that no suggestion or criticism is too trivial

or irrelevant to receive careful attention. Through these methods, in a spirit of good will and determination, we doctors will assure a continuation of the improvement and success of Blue Shield under the aegis of the profession.

It has been suggested that our professional relations force be further enlarged to comprise groups of participating physicians to combat lack of information among our colleagues in the informal atmosphere of our hospital lounges. In this regard each of us, after this particular meeting, can play a tremendously valuable part. Through improved dissemination of information and an awakened interest of the profession in Blue Shield, we believe that all problems can be met and solved as each physician exercises his fair share of influence in the determination of policies that will best serve his patients.

Liberalization of Contracts

There can be no argument that the ideal contract would give complete coverage of the individual from womb to tomb for a single subscription fee. But contrary to the belief of some individuals and groups, this contract would carry a substantial "price tag." There is no such thing as "free" coverage; it costs, and someone has to meet that expense. However, as has been outlined, plans for greater coverage for the subscriber are in the "hopper" and are being developed and will be made available at a cost that is actuarially sound and within the limits of ability of the subscriber to afford. It is imperative that this be done if we are to discharge our duty to the public (our subscribers).

Supervisory Control of Patients, Hospitals and Doctors

For any plan to be successful, it has become apparent that faulty or improper utilization or extra cost to the carrier or subscriber must be kept at a minimum. We believe that this is not a one-way street; that it is not the infrequent doctor who is solely at fault or that it is his sole responsibility. The subscriber must be shown that his request for unnecessary care, or services not covered in his contract will eventually result in increased premium rates and if sufficiently great might spell the demise of all *voluntary* health insurance. In addition, the hospitals must assume their rightful duty in controlling excessive and prolonged medication, so-called extras and undue overstay.

Where and how we doctors fit into this program is the problem. Some years ago, it was recommended by the MSMS that review committees be appointed by each individual hospital staff in an attempt to find a solution to the problem we faced at that time. Some are still functioning, but I dare say most have been inactive for some time. Whether or not something along this line is the answer to the proper supervisory control of our present and contemplated Blue Shield coverage or that some other method should be devised must rest with the individual hospital staff, county society and/or this House of Delegates. Certainly suggestions and recommendations that may come from resolutions and discussions in Reference Committee will be eagerly awaited, and we hope that this problem will be given serious consideration.

Action and Philosophy of the Profession

The following remarks are the result of the thinking of many individuals, and committees, who have studied this problem over many months and are not solely original with me. They will apply not only to the matter of prepayment health service but also to the role government and/or other pressure groups may seek to play. In the past, we have been faced with a frontal attack and we knew, to a large degree, what we were up against, but now most of it is a flank attack, the endeavor to get a "foot in the doorway."

Replace Apathy with an Active, United Profession.—Today there is a greater need for a united, forceful and informed profession than ever before. The basic reason for this special meeting of the House of Delegates was to give to you the information as to all the facets of prepayment of health care as of this moment. Through you primarily, and with the help of others, it is hoped that each individual member of MSMS will be better informed so that after due deliberation, considered decisions may be made. Once those decisions are made by the majority, then it is incumbent upon each of us to make it as nearly unanimous as humanly possible. The road of apathy and disunity can only lead to disorder and possible disintegration, and we must sound a warning to all our colleagues who don't care, or who are pulling in the opposite direction. As I said before, we must be-

come a fighting unit to keep the Doctors Plan truly *all doctors'* plan, to make it the best, and to give *service* to our subscribers so that the public will prefer the Doctors Plan to panel practice, organizational practice, governmental practice or any other scheme involving third party control.

Free Choice of Doctors.—That the patient should have the free choice of physicians has been said many times before by many people, but to us it should never become a trite saying. We must continually prove to our patients that this right is an important one; one that under any of the methods stated before could easily be lost through directive of an intervening third party. Oh yes, some plans maintain that when the individual joins their group that they have freely chosen their physician, even though it is actually a group of salaried doctors. Ridiculous!

Free Conduct in Medical Treatment.—As President Dwight H. Murray of the AMA has so succinctly stated:

"Another freedom closely tied to freedom of choice is freedom in the conduct of medical treatment."

There should never be a third party telling you and me how we should treat and care for our patients. It is well known that closed panel plans claim to run more cheaply than Blue Shield plans. This is mainly because, by directives, the amount and type of laboratory examinations can be limited, the amount of time spent with the patient can be designated and the treatment streamlined. It may be cheaper but it's "short-change medicine."

The dangers of shifting responsibilities for medical care from the patient and doctor to a third party are obvious. The caliber of medical care cannot be as high as that which you and I give the patient. Initiative succumbs to dictation and the doctor becomes a "clock-watcher."

Free choice of physician and free conduct of care engender a mutual confidence and trust between the patient and the doctor that is so necessary for the well-being of the individual. Remove this bond and the practice of medicine as you and I have known it, that priceless heritage passed on to us through the ages, is lost—and once lost, can never be regained.

This philosophy of our profession is not new,

it is not something esoteric, it is an every-day working concept that we all feel, share and believe in. It is the driving force that enabled us to become doctors of medicine, that carries us through our long hours of work, our problems and tribulations, and above all, really endears us to our patients.

What Do the People Want?

Of great importance also is the fact that any general service by professional people which is to be sold must (1) be what the public wants and/or needs; (2) be within reach of the average man's income.

I propose that we find out what the public really wants and that we get incontrovertible evidence to that effect. This will help us greatly when we talk to certain pressure groups who would have us believe that the real wants of the people are the same as the demands made by the leaders of pressure groups. I question whether these pressure groups actually speak the will of all of the people—or of a majority of the people—who subscribe to Blue Shield.

In other words, I propose that we go to the people through a survey or study that will give us part of the knowledge we need upon which to predicate any changes in our service as well as the information necessary to meet any false claims that may be made.

I propose, further, that this study or survey determine the extent and willingness of people to pay for certain categories of medical and surgical service so that we can better determine upon the most attractive, as well as the most valuable, package to offer. For example: would the people prefer to have home and office calls covered rather than x-rays? Would our subscribers be more willing to pay for coverage of certain diagnostic procedures than minor surgery? . . . and so forth.

I do not mean that services offered through Blue Shield should be limited to the most popular of the services, for we would all agree that such would be medically and scientifically unsound. Furthermore, Blue Shield must represent *all* the profession and if it does not offer the broad variety of medical and surgical services it cannot do that.

I merely indicate that with knowledge of what the public really wants, with knowledge of what the people are most willing to pay for, and with

these knowledges weighted by our own medical knowledge of what the public needs and what is actuarially possible within the limits of the public purse, we can arrive at the most attractive offer consistent with the public interest, consistent with our philosophy and consistent with the reasonable cost of our services.

Action, United

The actions we must take to preserve and implement these basic concepts must be arrived at

by you and our confreres back home after due and careful deliberation. These must not be hasty decisions but a result of clear thinking and interpretation of the information given to you. The stand our united Society takes can, and will have far-reaching effect. Let us work for what is best for all the people and for the profession as a whole and attempt to sublimate any individual personal or selfish wish. Let us see the forest and not the trees!

MICHIGAN MEDICAL SERVICE PAYMENTS TO DOCTORS OF MEDICINE

By County of Residence, 1940 to December 31, 1956

	Total	Per Cent of Total		Total	Per Cent of Total
1. Alcona	\$ 52,527.00	.02	46. Lenawee	\$ 774,420.75	.35
2. Alger	21,308.50	.01	47. Livingston	339,245.00	.15
3. Allegan	505,564.75	.23	48. Luce	137,746.30	.06
4. Alpena	1,020,214.87	.46	49. Mackinac	23,034.75	.01
5. Antrim	42,831.50	.02	50. Macomb	3,334,082.90	1.49
6. Arenac	121,413.00	.05	51. Manistee	157,160.75	.07
7. Baraga	139,442.25	.06	52. Marquette	847,900.89	.38
8. Barry	195,811.10	.09	53. Mason	285,598.25	.13
9. Bay	3,283,081.32	1.47	54. Mecosta	264,406.75	.12
10. Benzie	94,759.00	.04	55. Menominee ..	225,390.25	.10
11. Berrien	1,519,086.21	.68	56. Midland	124,592.15	.06
12. Branch	615,800.85	.28	57. Missaukee	131,556.25	.06
13. Calhoun	2,177,583.58	.97	58. Monroe	752,712.00	.34
14. Cass	104,051.50	.05	59. Montcalm	491,377.25	.22
15. Charlevoix	259,089.00	.12	60. Montmorency ..	14,885.50	.00
16. Cheboygan	421,770.25	.19	61. Muskegon	1,777,278.93	.80
17. Chippewa	1,315,216.25	.59	62. Newago	168,045.45	.08
18. Clare	47,886.25	.02	63. Oakland	12,296,484.03	5.50
19. Clinton	806,206.25	.36	64. Oceana	317,158.75	.14
20. Crawford	164,508.75	.07	65. Ogemaw	317,122.50	.14
21. Delta	513,266.50	.23	66. Ontonagon ..	195,305.25	.09
22. Dickinson	361,154.75	.16	67. Osceola	281,189.50	.13
23. Eaton	484,842.87	.22	68. Oscoda	1,891.00	.00
24. Emmet	1,125,643.27	.50	69. Otsego	152,636.29	.07
25. Genesee	14,164,582.22	6.34	70. Ottawa	1,102,624.05	.49
26. Gladwin	98,351.99	.04	71. Presque Isle ..	267,118.00	.12
27. Gogebic	222,314.90	.10	72. Roscommon ..	20,984.75	.01
28. Grand Traverse	1,322,240.20	.59	73. Saginaw	6,851,830.31	3.07
29. Gratiot	449,276.75	.20	74. St. Clair	2,595,275.50	1.12
30. Hillsdale	627,160.27	.28	75. St. Joseph	397,126.74	.18
31. Houghton	568,349.25	.25	76. Sanilac	319,116.25	.14
32. Huron	538,841.50	.24	77. Schoolcraft ..	172,323.50	.08
33. Ingham	7,600,981.34	3.40	78. Shiawassee	1,432,137.75	.64
34. Ionia	682,278.25	.31	79. Tuscola	566,176.85	.25
35. Iosco	130,706.00	.06	80. Van Buren ..	898,568.50	.40
36. Iron	73,963.00	.03	81. Washtenaw	8,226,460.84	3.68
37. Isabella	764,774.55	.34	82. Wayne	95,069,705.59	42.54
38. Jackson	1,279,756.08	.57	83. Wexford	589,776.50	.26
39. Kalamazoo	2,819,159.25	1.26			
40. Kalkaska	10,599.75	.01			
41. Kent	8,962,244.70	4.01	Total Payments to		
42. Keweenaw	2,733.00	.00	Michigan M.D.'s	\$198,260,489.65	88.71
43. Lake	8,634.25	.00	Outstate etc.	25,231,086.61	11.29
44. Lapeer	511,012.00	.23			
45. Leelanau	109,024.25	.00	GRAND TOTAL	\$223,491,576.26	100.00

A Method of Closing the Cataract Incision

Combining a Corneoscleral Suture and a Large Sliding Conjunctival Flap

W. C. Behen, M.D.
Lansing, Michigan

SUCCESSFUL removal of a cataract within its capsule requires a full half-limbus incision. This relatively wide incision in turn requires surgical closure with sutures.

Two factors are of equal importance in this closure:

1. To secure adequate *strength* in closure of incision,
2. To secure adequate *sealing* of incision.

The first, or *strength* factor, is best secured by some type of corneoscleral suture. The second, or *sealing* factor, is best secured by a large sliding conjunctival flap. This flap, drawn down from above, temporarily buries the corneoscleral suture and also covers the entire incision line. Thus, only by *combining* a corneoscleral suture with a large sliding conjunctival flap is completely adequate surgical closure secured.

Adequate *strength* of incision closure, obtained only by some type of well-placed corneoscleral suture, is the best insurance against vitreous loss. This applies to vitreous loss at the time of operation or later during convalescence and is of such obvious importance that no more need be said concerning this complication.

Adequate *sealing* of the incision, obtained only by a large sliding conjunctival flap, while adding but little to the *strength* of the closure, is the best insurance against *delayed* restoration of the anterior chamber. This delay in the reforming of the anterior chamber is not infrequent, and can result in many unpleasant and serious consequences.

Postoperative complications attributable to delay in reformation of the anterior chamber include such situations as prolapse of the iris, hemorrhage from iris, infection of the open incision, intraocular infection, iridocyclitis and degenerative changes of the cornea or vitreous with subsequent opacity of these structures. Secondary glaucoma may fol-

low occlusion of the drainage angle by anterior synechia forming at the iris base, or by epithelial ingrowth and proliferation through the delayed closure of the incision.

Some modification of the following technique may suit you better. It does not matter just how this procedure is done provided both required features of closure, *strength* and *sealing*, are accomplished. Any type of well-placed corneoscleral suture will do, provided it is followed with a sufficiently large sliding conjunctival flap to cover the entire incision line. However, the principle of burying both a well-placed corneoscleral suture and the entire incision line with the sliding conjunctival flap must be carried out. Neither procedure alone is sufficient: *combining* them gives adequate surgical closure. During the past five years I have performed operations by this method, and now use the following technique:

Starting as in a simple enucleation, the limbal conjunctiva is circumcised as close to the cornea as possible, leaving no epithelial tags attached to the edge of the cornea to get caught later and implanted in the incision. This circumcision is done throughout the upper three-fifths of limbus. The conjunctiva is now undermined far back so no tension will be present when the flap is later slid down over the corneoscleral suture and the entire incision line. After the flap is thus prepared, it spontaneously retracts out of the way and allows an easy opportunity to place the simple corneoscleral suture.

Using a Davis-Geck double-armed black silk suture, No. Seven-0, with an atraumatic needle, a very simple horizontal corneoscleral suture is placed, one bite in the cornea and one in the sclera. Firm corneal and scleral fixation is obtained by using a Burch double-pointed corneal pic. This firm fixation makes the placing of the corneoscleral suture relatively easy. It is important that these parallel bites be spaced *exactly*

opposite each other laterally, that is in the same vertical meridian, to avoid torsion of the lips of the incision in closure. When the needle has entered for the scleral bite and before the needle is entirely through, if it is found that the bite is not *exactly* opposite the corneal bite, the needle must be withdrawn and reinserted so that it will be *exactly* opposite the corneal bite. Needless to say both the placing of the corneoscleral suture and the tying of the corneoscleral suture should be done under the best of visual conditions, preferably under loupe inspection.

With the corneoscleral suture accurately placed, and the suture loops laid well back out of the way, a full half limbus incision is made with a Graefe knife—emerging between the corneal bite and the scleral bite of the corneoscleral suture; these two bites having been placed about 2 mm. apart. For those who wish to use a keratome incision with lateral scissors enlargement this substitution could be made without any change in technique, and with probably slightly less danger of cutting the suture.

After an iridectomy, either peripheral or complete, and after the lens has been extracted, the iris pillars may be replaced either before or after the corneoscleral suture is tied, depending somewhat upon the apparent need for haste in tying the corneoscleral suture. This suture should be tied with a simple square knot and not too much tension used to avoid wrinkling or inverting of the edges of the incision. A tension knot should be avoided as it is apt to invert the edges. The suture, when properly placed and tied, now appears as a box-like or mattress-like square suture entirely without, and lying across the surface of the incision, rather than incorporated within any portion of the lips of the incision. Fairly long ends are left on the suture, approximately 2 to 3 mm. This will assist in its removal at a later date.

The conjunctival flap is now ready to be slid down, and, for this purpose it is both convenient and economical to use the discarded ends of the double-armed suture which has already served for the corneal suture, each end being now armed with a single needle. These lateral conjunctival sutures are inserted at approximately 1:30 and 4:00 o'clock on the limbus and 10:30 and 8:00 o'clock on the limbus. Slight variation in the position of these sutures may be used, or they may

be removed and re-inserted, or additional sutures may be used in order to get adequate coverage of the incision line. If the flap seems a little tense in any area, it may be snipped slightly in the center with scissors to relieve any undue tension on the cornea. Usually two simple lateral sutures will suffice to give adequate incision coverage. In tying the conjunctival sutures, the first knot of each suture should be a tension knot. Otherwise there is a tendency, due to the retracting of the flap, for the first knot to become partly untied before the second knot can be placed. These conjunctival sutures cut out spontaneously after the fourth or fifth day, allowing the conjunctival flap to automatically retract upward and expose, or at least partly expose, the corneoscleral suture.

The corneoscleral suture is not removed until about the twelfth day, thus insuring against any accidental opening of the incision during its removal. If the suture is not completely exposed by the spontaneous upward retraction of the conjunctival flap, it may easily be exposed fully by teasing upward the still slightly loosened edge of the conjunctival flap. This upward teasing of the edge of the conjunctiva may best be done by a cotton applicator saturated with cocaine and adrenalin. This gives a well-anesthetized and bloodless field for the removal of the suture. If the suture is still slightly buried and does not readily present itself for a scissors removal, a very easy way to remove it is to slide the point of a cataract knife, cutting edge out, under one of its loops. This procedure should be done under loupe inspection thus guaranteeing against any trauma in its removal.

If by accident the corneoscleral suture should be cut at the time of making the incision, or if the corneoscleral suture should break during the process of tying it, then no attempt should be made to slide down the conjunctival flap without first reinserting and tying down a new corneoscleral suture; otherwise the conjunctival flap, when sliding downward, will likely catch in the edge of the only partly closed incision and may result in unexpected complications. Under such circumstances the wound is probably already partly gaping, and any attempt to slide down the conjunctival flap will simply make matters worse. Rather than attempt to do this, it would be safer to close the eye at once without further manipulation.

The use of a sliding conjunctival flap alone to close the cataract incision, as suggested originally by Kuhnt, has largely been discarded. I believe that the reason this method is not more generally used today is that it is difficult to accomplish and is actually an unsafe procedure unless the lips of the incision are first securely closed with a corneoscleral suture. A sliding conjunctival flap, if used without a primarily placed corneoscleral suture, must be pulled down simultaneously on both sides. This is a bothersome procedure and requires trained assistance. Such is not the case when a corneoscleral suture is first used to give a firm smooth non-buckling base over which the conjunctival flap slides easily and smoothly without any catching in the wound or tendency of the corneal lip to buckle. This tendency of the cornea to buckle is a definite danger when the corneoscleral suture is not used first.

I wish—at the danger of repetition—to emphasize the fact that if this method of closing the cataract incision has any merit, and I believe it has, it is because of the combining of two older procedures, namely, a sliding conjunctival flap and a corneoscleral suture.

Routine therapeutic procedure consists of: 3 grains of phenobarbital several hours prior to operation, one drop of 1 per cent silver nitrate in eye several hours prior to operation, blocking of the seventh nerve, retrobulbar ciliary novocaine block with 1 or 2 minims of adrenalin added if the patient's blood pressure is within normal limits, cocaine and adrenalin surface anesthesia, homatropine at beginning of preparation. If capsule has been delivered without rupture, eserine is used; if capsule has ruptured, and any cortex remains, atropine is substituted for eserine. White's ointment and routine dressing complete the procedure.

Patients upon whom this method of cataract closure has been used may with safety be allowed a great deal more freedom than with former methods of closure. I have no hesitancy in allowing them to turn upon either side within six hours after operation. If necessary, and conditions indicate, they may get out of bed safely on the second or third day, although this is not a routine procedure. Such increase of postoperative freedom and mobility is of course in direct conformity to the new era of ambulation being allowed all surgical patients, particularly elderly surgical patients.

In a series of 100 consecutive cases upon whom this type of closure was done, all but four are able to read ordinary newspaper print as a final visual result. There were no eyes lost. Postoperative astigmatism has been reduced by an average of one or more diopters over previous results. There is more postoperative redness present in these cases for a few weeks than in cases where no large conjunctival flap has been used; however, this redness is not true pathologic redness and has no apparent clinical significance. Of the above 100 cases all but three had good anterior chambers present at the first dressing on the third day. The delaying factor in one of these three was a very slight incarceration of one iris pillar. One patient became confused, got out of bed, and removed all his dressings three hours after operation. Upon examination he was found to have a well formed anterior chamber.

In conclusion, this procedure adds no more than five minutes to the time required for the usual cataract operation. Most of the manipulation is done prior to the section when the savings of a few minutes of time is of no importance. It adds no risk to the operation, and, at least in my hands, has materially lessened complications and given better end results.

POLIO PUNCH LINES

Three newspapers carried these punch lines in editorials recently in an effort to get people under forty inoculated against polio:

"It seems odd to have to encourage anyone to take shots—almost as odd as it would be to have to encourage a hungry man to eat or a drowning man to reach for a life preserver."—*Louisville Times*.

"A nation which for years cheerfully contributed funds to find protection from polio soon may be in the odd position of having to raise money to get people to use it!"—*Long Island, N. Y., Star-Journal*.

"The means of licking a very serious disease are at hand. But vaccine does not climb down off a shelf and inject itself."—*Charlotte, N. C., Observer*.

Spring Valve Mitral Prosthesis

Report of One Case with One-Year Follow-Up

By James H. Wible, M.D., Lyle F. Jacobson, M.D., Prescott Jordan, Jr., M.D., Charles G. Johnston, M.D., and Harper K. Hellem, M.D.
Detroit, Michigan

A SATISFACTORY method for the surgical treatment of mitral insufficiency has been sought for many years. Many approaches to the problem have been made. The currently prominent methods are the circumferential suture¹ and polar cross fusion.² These two methods are advocated primarily for those patients who have their insufficiency resulting from a dilated mitral annulus with pliable leaflets; not a calcified and fixed valve.

Despite the anatomic deformity, insufficiency results from a loss of effective, coapting, valvular tissue; an absolute or relative loss. It has been our working premise, therefore, that this deficient area can best be corrected with a prosthesis. The frame for such a prosthesis was fabricated from a spring alloy made by the Elgin National Watch Company for use in the main spring of their watches.* The frame was then covered with commercially available nylon (Fig. 1). These devices were placed in the left ventricles of experimental animals (Fig. 2) and were found to control both induced and spontaneous organic mitral insufficiency. No deleterious effects were found upon following the animals for many months and the valvulogenic properties of the prosthesis were noted.^{3,4}

After obtaining encouraging results from following these animals for twenty-two months, it was felt that clinical trial was warranted. One functional Class IV patient was selected who was rapidly deteriorating because of pure mitral insufficiency.

Case Summary

M.S., a woman thirty-three years old, is a patient who has been followed in this hospital for many years. In her past history, there were no symptoms of rheumatic fever. At age fourteen, she developed the onset of

From the Departments of Medicine and Surgery, Wayne State University College of Medicine, Detroit Receiving Hospital, and Dearborn Veterans Administration Hospital. Aided by grants from Michigan Heart Association, Receiving Hospital Research Corporation, and Public Health Grant H-2553.

*Material and technical advice, courtesy Mr. Thomas R. Green, Elgin National Watch Company.

bronchial asthma and she has been known to have a "heart murmur" for the last nine years. The first episode of heart failure occurred in 1953 and responded well to digitalization. At that time, she had only slight cardiac enlargement. In the ensuing three years, the patient was admitted to the hospital at increasingly frequent intervals in failure. For one year prior to operation, she had been totally incapacitated because of profound fatigue and marked exertional dyspnea—able to take only a few steps without resting. By serial x-ray examination, there had been rapid enlargement of the left ventricle.

Physical examination at the time of admission to the hospital on March 26, 1956 revealed temperature 98°, pulse 132, respiration 32, blood pressure 135/90. General appearance was of a chronically ill woman with apprehension and shortness of breath.

Neck vein distention at 45°.

Lungs: moist rales at both bases.

Heart: frequent extrasystoles, PMI 15 cm. left of the sternal border. Grade 4+ apical murmur with marked systolic thrill. Grade 2 mid-diastolic murmur.

Liver: 5 cm. below right costal margin.

Extremities: 4+ pitting edema.

Circulation time 33 seconds arm to tongue.

Venous pressure 120 mm H₂O.

EKG: non-specific myocardial damage and left ventricular hypertrophy.

Hemodynamic studies, performed in January, 1955, when the patient was out of failure, showed normal cardiac output and normal pressures in the pulmonary artery and pulmonary capillary bed; the latter excluding significant organic mitral stenosis.

The patient was treated intensively with digitalis, mercurial diuretics, salt restriction and bed rest with resolution of the signs of acute failure. It was felt that this was the optimal time in this patient's course to offer operative intervention.

On April 5, 1956, this patient was taken to the operating room and a routine left thoracotomy was performed through the bed of the fifth rib. Upon opening the chest, the blood pressure dropped to 50/0 and remained at this level or lower throughout the remainder of the procedure. The mitral valve was explored and there was a marked regurgitant jet noted. (Grade V on a scale of O-V as estimated by digital palpation.) In addition, the anterior leaflet was freely movable, the posterior leaflet was thickened and rolled under, and there was no element of stenosis found. A prosthesis was inserted that stopped only part of the jet. At this time, the left ventricle began to dilate and the beat became

ineffectual. The prosthesis was immediately removed and massage was instituted which improved the beat but not the dilatation. A somewhat larger prosthesis was inserted, but the effect upon the jet could not accurately be determined because of the marked hypotension at that

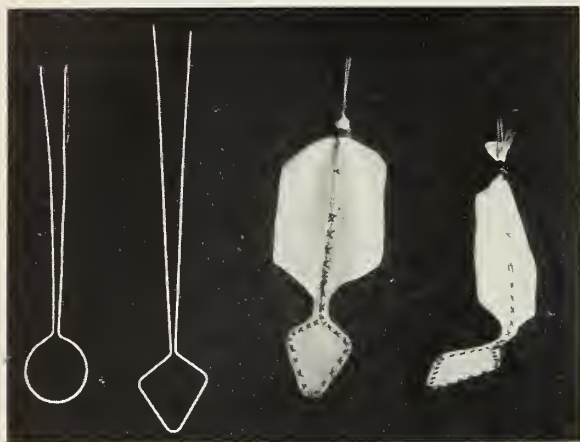


Fig. 1. Prosthetic frame; nylon covered and shaped prosthesis.

time. By palpation, however, the prosthesis could be felt to be in the proper position and to move as it should to be functional. It was sutured in place and almost immediately decrease in the dilatation of the left ventricle was noted. The chest was closed and one hour later the blood pressure had returned to the preoperative level and the patient responded from her anesthesia.

The postoperative course was uneventful, and the patient was discharged from the hospital on the fifteenth postoperative day.

The following early and long term observations have been made:

Grade 2+ systolic murmur one hour postoperative.

No alteration in bleeding, clotting, clot retraction or prothrombin times.

No free serum hemoglobin.

Continued normal platelet count.

BSP unchanged from normal.

BUN unchanged from normal.

Transient rise in serum bilirubin cleared by the 11th postoperative day.

Hemoglobin stabilized at 10.5-11.5 grams at one month.

Transient rise in reticulocyte count with return to normal at one month.

Ten hours postoperative, the patient volunteered she could "breathe easier."

Seven days postoperative, she could walk 90-foot hall in the hospital without respiratory distress.

She was able to lie flat in bed the eighth postoperative day.

Fluoroscopy revealed the prosthesis to have directional motion with about 15° to 20° up-and-down motion.

Teleoroentgenograms first showed some decrease in heart size at six weeks and gradually decreased in size to one year.

One month postoperative, the patient was readmitted with a febrile episode suspected of being subacute bacterial endocarditis but never proven by culture. Therapy was given for three weeks, and the patient became afebrile after thirteen days of treatment. The apical

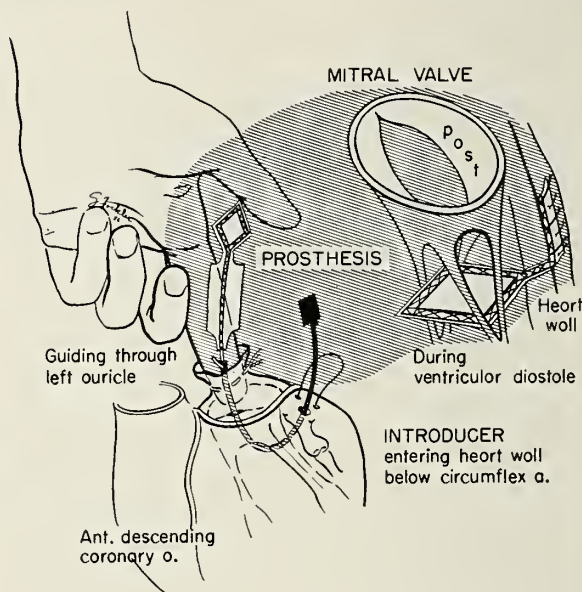


Fig. 2. Technique of retrograde insertion of prosthesis.

murmur regressed to grade III+. Subsequent to this, the patient has had intermittent episodes of unexplained auricular tachycardia which have resolved spontaneously.

Discussion

Follow-up of this patient for one year has confirmed many of the observations made in animals. First, there has been no evidence of alteration of the blood elements, i.e., no hemolysis or alteration in clotting mechanisms. By fluoroscopy, continued directional motion is noted. Since the patient is still living, we have not been able to show that the prosthesis has been covered by endothelial tissue as occurs in the animal. However, there has been no evidence of embolization either of clot or the prosthesis itself as has been reported with other foreign bodies placed in the left ventricle.^{5,6}

It has been the clinical impression of the combined medical and surgical group that has followed this patient closely in clinic that her rapid downhill course has at least been modified. Subjectively and semi-objectively, the patient is improved in that she can climb a flight of eight steps without distress. She is able to get about to do

part of her housework and shopping. Objectively, serial chest x-rays show a reversal of the rapid increase in size of the heart to some reduction in overall size (Fig. 3).

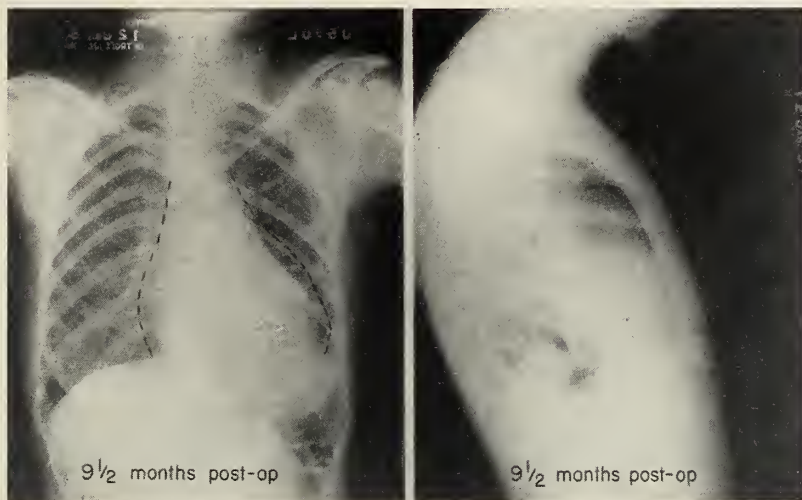


Fig. 3. Superimposed before and after teleoroentgenograms and lateral projection (prosthesis retouched for printing).

With the results obtained in the one patient with far-advanced mitral insufficiency, we have been encouraged to proceed to further clinical trial of the spring valve in an attempt to determine whether it might have a place in the armamentarium for the control of valvular heart disease.

Summary

1. The basis for the clinical trial of the mitral spring valve is discussed.
2. Clinical summary of one patient with one year follow-up is presented.
3. Encouraging results lead us to believe further clinical trial is indicated.

GRAND RAPIDS TORNADO SUMMARY

At a recent meeting of the Committee on National Defense, W. B. Prothro, M.D., reported briefly on the Grand Rapids tornado and the fact that about thirty minutes prior to the time the tornado hit, a TV training course had just been broadcast advising what to do in a tornado. It was felt that this helped in some respect those persons who happened to be watching at the time. The alert was out by 3:00 p.m., ambulance personnel were ready at the time the storm hit. Casualty care station was set up at the Grand Rapids Armory for screening of patients before they went to hospitals. Lights were out for a couple of hours in two hospitals, and since that time auxiliary equipment has been secured in case such an emergency should arise again. Doctors and nurses were alerted and on the job promptly. Blood banks were in full use by 10:00 p.m., and far more prospective donors available than needed.

The Committee was informed that the Grand Rapids

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hospitals were able to absorb the number of casualties. There were 181 homes destroyed, 144 damaged, forty trailers destroyed, thirty-four damaged, seventeen persons killed, 219 injured. The Committee was further informed that dead animals became a problem and needed to be hauled away. Excellent response was secured in housing the displaced persons in private homes, hospitals, hotels, and good care was taken of all those in need. Feeding stations were established and, although they were not too busy, large quantities of prepared food were contributed by the hospitals, with all material being donated without question by various suppliers.

The problems that existed were communication; chain of command, who was to be in charge; lack of top level direction; medical identification cards; and traffic jam at the hospitals themselves. The hospital kitchens prepared 12,000 meals and trucked them out to the points in the area needed.

Detroit Surgical Association

Meeting of November 26, 1956

DIVERTICULA OF THE CECUM: A REPORT OF SEVEN CASES

WILLIAM J. MILLER, M.D., and
JOSEPH A. WITTER, M.D.

Diverticula of the cecum are more common than has been thought. They occur in 0.7 per cent of cases of diverticulosis of the left colon. It is thought that they are due to the retention of a transient appendix which appears early in fetal life. They usually show all three layers of the bowel wall, but differentiation between "true" and "false" types may be unsatisfactory. The diverticula may become inflamed, producing the clinical picture of an acute condition of the abdomen, usually diagnosed as acute appendicitis. A definite differential can be made only by laparotomy in the acute phase. When the diagnosis can be made without operation, conservative management may be best. At surgery, simple excision is recommended. Resection and primary anastomosis carry a much higher mortality rate. The most frequent complications are perforation and abscess formation.

Seven cases of cecal diverticula are reported from the Highland Park General Hospital. Six were diagnosed at operation for acute appendicitis. One was found radiologically in a patient with a peptic ulcer. Surgical treatment was carried out by excision or inversion in three of the cases in which operation was performed. Two others had a resection and anastomosis in two stages. One patient operated upon had cecal di-

verticula uninvolved by his appendicitis. They were not excised.

The diagnosis was confirmed microscopically in those cases in which the lesion was described. Pulmonary embolism and adynamic ileus complicated two cases, but all patients recovered.

OBSERVATIONS ON THE TREATMENT OF ATRESIA ANI

D. W. McLEAN and T. C. ARMINSKI
(Read by title)

LETHAL COMPLICATIONS OF NASAL OXYGEN

W. W. GLAS, M.D., and JACK W. MARRS, M.D.

Nasal oxygen has been widely used for the treatment and prophylaxis of shock and respiratory insufficiency. Depending upon a variety of factors, acute gastric and gastro-intestinal dilatation can occur from nasal oxygen with fatal results.

Seven clinical cases are presented, two in detail. Six of these patients died from the acute gastric dilatation.

Experimental gastric dilatation in dogs revealed marked changes in respiration, cardiac action and blood pressure, with death due to respiratory failure.

Early recognition of this syndrome is imperative to avoid death. A method of treatment for severe gastric dilatation, which is experimentally satisfactory, is presented.

Meeting of January 28, 1957

PROGNOSIS IN ARTERIAL INSUFFICIENCY ASSOCIATED WITH CLAUDICATION AND ULCERATION

HERBERT J. ROBB, M.D., JOHN W. BOWDEN,
M.D., and RUDOLPH CASTELLANI, M.D.

In patients with symptomatic peripheral occlusive disease who have segmental arterial blocks, many good results have recently been obtained by arterial grafting procedures. With a view to the future evaluation of this type of treatment, we decided to study a group of individuals with peripheral arterial insufficiency on whom lumbar sympathectomy alone had been performed. An attempt was also made to determine the factors which influence the prognosis of patients with arterial insufficiency.

In all, 140 male patients, seen at the Dearborn Veterans Administration Hospital, were studied. The average follow-up period was three years.

The 140 patients were grouped according to the indication for surgery, which was ulceration (or gangrene) in fifty-five patients and claudication alone in eighty-five cases. They were also divided into diabetic and non-diabetic groups.

While there was no significant differences between the ulceration and claudication groups in regard to the relief of night pain or claudication, amputation and mortality rates were definitely higher in the ulceration group.

The diabetic group did more poorly than the

(Turn to Page 735)

non-diabetic. However, a careful analysis of each of these groups revealed that the higher proportion of ulceration cases in the diabetic group was responsible for the difference. Actually, non-diabetic patients with ulceration did just as poorly as diabetic patients with ulceration and diabetic patients with claudication did just as well as non-diabetic patients with claudication.

Walking ability, the distance travelled before claudication occurred, was usually not improved after sympathectomy.

It is concluded that all patients with symptomatic peripheral occlusive disease should be

studied by arteriography in order to select those with segmental arterial blocks. Arterial grafting, which now seems to offer better results, may well prove to be the treatment of choice in this type of patient.

THE RESULTS OF GRAFTING SURGERY OF PERIPHERAL OCCLUSIVE DISEASE

D. EMERICK SZILAGYI

(Read by title)

SURGICAL ASPECTS OF CORPUS LUTEUM CYSTS OF THE OVARY

CARL COFFELT and C. S. STEVENSON

(Read by title)

Meeting of February 25, 1957

THE STAPES MOBILIZATION OPERATION FOR OTOSCLEROSIS

JAMES E. CROUSHORE, M.D.

It has been known for more than a century that osteogenesis in the region of the oval window results in fixation of the stapes and produces deafness. In otosclerosis, when there is good cochlear reserve, improvement in hearing can be expected either when the stapedial footplate is remobilized, or when a surgically created fenestra is made into the perilymphatic space. It remained for Lempert to develop a practical one-stage operation for fenestrating the lateral wall of the horizontal semicircular canal. Lempert's technique today gives improvement in hearing to the practical unaided level in about 75 per cent of the ears operated on the ideal candidate.

The history of efforts to mobilize the stapes parallels the development of ossicular surgery, which reached a rather high level of technical achievement about the end of the 19th century and the beginning of the 20th century. In most instances, stapes mobilization was incidentally employed in the process of eliminating infection and diseased ossicles and gave way to stapedectomy, which eventually was abandoned as a futile procedure to improve or restore hearing.

In 1946, Lempert presented a technique for disengaging the tympanic membrane from its annular attachment, permitting exposure of the middle ear structure for tympano-sympathectomy. This approach is useful for securing middle ear biopsies, cutting adhesions and visualization of the middle ear structures. It was employed by Rosen to test for the mobility of the stapes to determine suitability for fenestration surgery. During the testing for ankylosis, he found the stapes was inadvertently remobilized in a few instances, with consequent improvement in hearing. This experience led to the suggestion of employing this approach for surgical treatment of otosclerosis.

Since the fenestration operation is designed to by-pass sound waves around the fixed ossicular chain directly to the newly created fenestra in the horizontal canal, the pathologic lesion is not disturbed. The stapes mobilization approach, however, directly attacks the pathologic lesion at the oval window. Under ideal conditions, the mobilization operation completely respects the integrity of the tympanic membrane-ossicular chain vibratory mechanism, so that the mechanical advantage of this impedance matching mechanism is not lost. In most instances, when a good result is obtained, the hearing will return to a higher level after mobilization than after fenestration.

Since the mobilization operation is less debilitating to the patient, it has a wider variety of applications. When hearing loss in one ear is minimal, but handicapping in the other, binaural hearing may be obtained with little morbidity. If one ear has been fenestrated successfully, the patient may be more inclined to undergo the smaller operation on the opposite ear. In advanced mixed deafness, enough improvement may be obtained to render a hearing aid more efficient. Individuals who have a moderate hearing loss, but are not handicapped for ordinary social conversation, yet need better hearing for their occupation, such as school teachers, store clerks, secretaries, et cetera, would be justified in submitting to the mobilization operation, but would hesitate to undergo the more debilitating fenestration operation.

The operation is done under local anesthesia. Excellent lighting must be available. Magnification must be employed, using magnification varying from 3 to 15 times the actual size. After the tympanic membrane is elevated from the tympanic sulcus in the posterior half, the membrane is then reflected forward, exposing the middle ear structures. The stapes is mobilized by a combination of manipulations. The commonest cause of failure is the breaking of the crura. This can be

avoided in most instances by prying the footplate of the stapes loose, rather than trying to loosen it by backward pressure on the head and neck of the stapes. A vibrating mechanism attached to the handpiece of a dental drill is of value in some cases.

Various methods are employed in the operating room for testing the hearing before and after mobilization. In most instances, the operator can obtain fairly accurate information as to whether or not the stapes has been mobilized.

Although there is very little debility associated with this operative procedure, the procedure, technically, is very difficult and should not be attempted until one has first performed the operation repeatedly on the cadaver. Complications can occur, but these can be kept to a minimum with improved technique. The complications reported in the literature are incudo-stapedial dislocation, crural injuries, hemorrhage, bony spicules or bone dust permitted to remain in the middle ear, tympanic membrane perforations, facial paralysis, and postoperative infection.

In well-selected candidates, one can reasonably expect about 40 per cent of the individuals operated on to obtain good practical hearing.

RESULTS OF GRAFTING THERAPY IN PERIPHERAL ARTERIAL OCCLUSIVE DISEASE

R. T. McDONALD and D. E. SZILAGYI

The report deals with the results observed in 168 cases of peripheral occlusive arterial disease operated on between January 1, 1953 and December 31, 1957. Operative indications in this series included intermittent claudication severe enough to interfere with the patient's mode of life, rest pain, impending gangrene, and a remediable lesion as visualized by arteriograms. The surgical technique in aorto-iliac disease was resection, in the femoral areas resection, exclusion and bypasses. Forty of the lesions were aortoiliac, thirty-three iliac and ninety-five femoro-popliteal; all operations were followed by serial postoperative aortograms. Of the forty aorto-iliac lesions, thirty-seven (92 per cent) showed early and thirty-six (90 per cent) showed late success. The rate of early and late good results among the other cases was as follows: Iliac operations 75 per cent and 72 per cent, femoro-popliteal operations 77 per cent and 46 per cent. In the entire group of 168 cases, there was an immediate success rate of 81 per cent and a late success rate of 60 per cent.

In looking for the causes of late failures, the most common factor leading to the obliteration of a previously patent graft was found to be the progression of the original occlusive disease process. Technical operative details did not play an important role. Deterioration of the homo-

grafts was a rare cause for the loss of a previously good result but degenerative changes were observed fairly commonly (in about 17 per cent of the cases); these may lead to later occlusion.

RADIO-ISOTOPE AMINO ACID METABOLISM OF THE PANCREAS

ROBERT D. WEBER, M.D., MELVIN SIKOV, PH.D., and ROBERT M. WHITROCK, M.D.

The effect of secretin and parasympathomimetic stimulation of the pancreas in healthy dogs is shown by measuring the increased uptake of a radioactive amino acid (L-Methionine S-35) injected intravenously.

In acute experiments, the common bile duct was transected and cannulated to collect bile, while an isolated duodenal loop was likewise cannulated to collect pancreatic secretions. During a one-hour collection period and compared with a control series, the radioactive methionine was shown to increase in pancreatic secretions and in the pancreatic tissue itself. Secretin produced only a slight increase in these values but parasympathetic type stimulation (Urecholine injection) increased the uptake of pancreatic tissue five-fold and increased the amount in pancreatic secretion almost twenty-fold.

EFFECT OF ADMINISTRATION OF METABOLIC MATERIAL EFFECTIVE FOR DISSOLVING CHOLESTEROL ON THE HEPATIC BILE OF PATIENTS

CHARLES G. JOHNSTON and FUMIO MAKAYAMA

Human hepatic bile is saturated with cholesterol and will hold no additional cholesterol. The bile of the dog, cow, pig and sheep are not saturated with cholesterol and will take up additional cholesterol. Stones placed in the gall bladders of the latter animal will be dissolved in a matter of a few months. With the addition of a preparation of ox bile salt-lecithin, animal bile can be made much more effective in dissolving cholesterol or human gallstones than normal animal bile. This material can easily be introduced into the hepatic bile of man in effective concentrations. Studies on patients illustrating the effect of introducing materials effective in dissolving cholesterol into hepatic bile of patients is presented.

TUBERCULOSIS CASES IN DETROIT

In 1956 there were 2,586 new cases of tuberculosis discovered in Detroit according to Health Department records.

Of these new cases 1,618 were active tuberculosis; 172 active cases were found through the mobile chest x-ray unit survey.—*Detroit Medical News*, May 13, 1957.

Philosophy and Facts

Do we want to keep our public trust—Michigan Medical Service?

The pioneering spirit that permitted the establishment of this program in 1939 is necessary today, if we are to meet the demands of a changing economic, political and social climate.

We have an alternative. We can place our heritage in the hands of others—big government, big labor or big business.

What is your choice?

The basic philosophy of the medical profession is and has been to provide everybody across the board with medical care at a price he can afford to pay. The early thinking of the founders of Michigan Medical Service formulated the principle of the service plan and prescribed the utilization of community rating based on integration rather than segregation of risk.

Time has passed and with it has come change.

Changes in medical science itself necessitate changes in coverage by insurance and in cost of that coverage.

Changes in people's demands and needs must be reflected in the provisions of insurance policies. Experience has shown that today there is both a demand and a need for coverage other than that necessary for strictly catastrophic conditions.

Changes in political and social philosophies, particularly as related to security of which health is a segment, require alterations in the operations of insurance mechanisms.

The people are partners of the doctor in these plans and should be accorded their just place in the partnership. Everyone is personally and individually concerned with health; not just the facilities for care, not just the quality of care or the convenient availability of it, but with its costs as well.

Because voluntary health insurance and prepaid medical care are of such vital, direct and personal concern to such a large percentage of our population, we are rapidly approaching the day when these programs will be regulated by legislation unless all of us—doctors, hospitals insurance and service plans, people and all purveyors of health services assume the responsibility of voluntary regulation and restraint. This is a stern reality.

The apparent need for evaluation and re-evaluation at both local and state levels on a systematic, realistic and fair basis cannot be ignored.

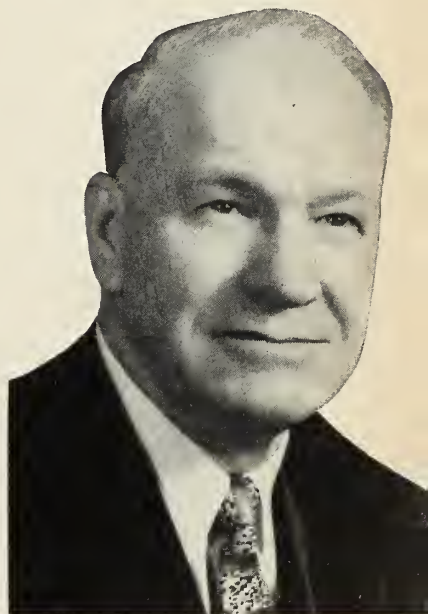
Our only answer is to meet economic and social change with intelligent application of a combined economic and scientific realism based on tested philosophy and accompanied by sound fact.

It will take courage. Doctors have it.

Rich Walls M-10

President, Michigan State Medical Society

President's



Message

Editorial

YEAR OF DESTINY

The year 1940 was of great significance in medical socio-economics, especially for the people of Michigan. That year saw the accomplishment of prepaid medical care for our people. Michigan Medical Service, our Blue Shield, became a fact. The feasibility of guaranteeing, on the community state-wide experience basis, the professional care for our patients was an established demonstration.

The medical profession had recognized a community need which it alone could solve. The age old custom of caring for patients who were desperately in need financially as well as medically, left patients as well as doctors unhappy, collections averaging 60 per cent of charges and much of the doctor's effort necessarily devoted to economic stress. For years, appeals to the insurance industry had been fruitless, appeals to our national officers met with the rebuke—"Just practice medicine—leave medico-economics to the insurance companies."

Ten years of study by ambitious pioneers of medicine in Michigan, trial and error, rebuff from some, encouragement from enough to assure a worthwhile effort, enthusiasm for a worthy objective, and repeated return to the fray, gave us Michigan Medical Service. Many of those undaunted dreamers are still in there fighting.

The year 1940 saw a division of the medical men into two generations. Before that time, every soul of them knew the pangs of unemployment of their people, as well as of themselves. There were no reserves of money to meet unexpected catastrophe in the form of sudden hospitalization or surgery. Hospitalization of a patient meant arrangements with the whole family and friends to establish credit. Too frequently, the patient and his family had to go "on relief."

Now what? Since 1939, the medical schools in the United States have graduated 110,852 doctors of medicine. The 1956 AMA Medical Directory listed 219,288 doctors in the United States and dependencies. Almost exactly half of the doctors now active never saw practice before prepayment—never had to watch for the first paying patient. Calls, even at night, were never refused. Patient's

needs were uppermost in the medical mind even their patients' economic security, involving great effort, expense, devoted sacrifices of time and discouragement from our own people. Medicine showed the way to a much more satisfactory managing and budgeting for health matters. Far-sighted enthusiasts in our profession did a herculean work for our public and for ourselves.

Our Benefits?

The profession by its solution of a great economic impasse for our patients, saved the private practice of medicine to them and to ourselves. The socio-economic evolution of the medical world is the direct result. We changed our own economic picture, almost eliminated the collection feature, and assured prompt and direct payment to the doctor beyond the wildest dreams of our original workers. Now some of our doctors are demanding revision of fees paid for many individual items. The researchers who have been working on fee schedules know there are inequalities. They also know that historically there were the same inequalities—one group earning more than another—but that is a question that has always been with us, a question that medical societies never did settle and our service organization should not be asked to solve. Blue Shield in Michigan has not raised rates since the inception of the \$5,000 income limit contract, but piecemeal it has increased services and fees until now we are paying 21 per cent more for the average service. In 1956, there were 91,000 such services every month.

Has Michigan Medical Service given some distinct socio-economic advantage to our doctors? This question is only academic for the younger generation—they never saw practice before prepayment. But for the older half of our members, stop and think. Did you collect 60 per cent of your charges? Perhaps, if you are a very unusual man, at great effort you may have collected 75 per cent. Michigan Medical Service is not paying you as much as you would like, but very probably it is paying relatively more than you received under the old regime.

How many would like to return to the 1930's?

t probably will never happen, for before that labor, then government, will have encompassed us. That is labor's ultimate goal, "Medical care for all at no cost to the individual." Labor is not specially interested in the Doctor of Medicine.

ADVANCE OF CIVILIZATION

For generations, two or three things have been universally pointed out as the great steps in the advancement of civilization. In prehistoric times, the tribes, consisting of a few families, united for the hunt to provide food for all, not just for the lucky huntsman. Probably there were very few actual families in those days as we now understand the family.

Most food was eaten raw until someone discovered that fire from lightning would improve the taste. The discovery of how to produce and control fire was the first acknowledged advancement in civilization. The earliest people were of necessity nomads, hunting for food. As a good hunting ground became exhausted, the tribe moved laboriously from place to place.

The wheel was the next great advance, and successively came the ability to work in iron (and the other metals)—copper probably first.

In modern times came the discovery of the combustion engine which really was a universal move forward. Our own generation has witnessed the conquering and capture of the atom and its tremendous possibilities. Such, in brief, is the accepted history of the advance of civilization. We submit one colossal accomplishment mentioned but not stressed or listed. Without doubt, man's greatest discovery, and most important to him and to the medical profession in his development, is **TEAMWORK**—the ability and purpose to work together by agreement.

A generation ago, 85 per cent of the Michigan men of medicine did a conspicuous and successful herculean task, in spite of almost insuperable odds, in spite of the expert who claimed medical services were uninsurable, in spite of opposition from political and quasi socio-economic leaders and national medical authorities, and in spite of extremely vigorous opposition by some of our own Michigan colleagues.

A medical generation ago, determination and absolute teamwork accomplished a miracle. Now, another and greater problem faces the profession. Can we and will we continue to guarantee unhampered private practice of medicine to our pa-

tients—and maintain the privilege for ourselves? Again one answer—all must work together as a team. Problems are to be solved by the meeting of minds, not forgetting the lessons of experience—absolutely banning misunderstandings and thoughtless insinuations. Man's greatest discovery was not the wheel, the internal combustion engine, nor the atom. The greatest discovery is teamwork by agreement—the fact that working together to produce more of the good things of life pays better than fighting with one another over the division of what is already available and risk losing what we have won at such great cost.

* * *

The American people have learned this lesson of teamwork spectacularly. We recently saw an article listing the twenty-five greatest corporations in the United States. These are combinations of many people, about two-thirds of which have incomes of less than \$7,500 a year, who by combining resources are giving employment to countless working persons and are paying vast amounts in taxes to government. The number of stockholders in these great corporations exceeds the number of employed workers by over 600,000. Only six of that number have less stockholders than employees. **WHAT A LESSON IN UNITED TEAMWORK!**

A YEAR OF TRIAL

Officers, administrators and policy-making groups responsible for Michigan's Blue Shield will never forget the year 1956—a year of profound influence; a year of history-making events and decisions.

First came the hearings before the Governor's Commission, instructed to "determine the causes of excessive cost and to find out how to render more and better health care more efficiently and at less cost." There were weeks of almost daily newspaper front-page stories—frequently unfriendly publicity. It was primarily an investigation of Michigan Hospital Service, but practically all the testimony was directed at the medical profession—its faults and failures; its role in putting patients into the hospital; the care ordered, and releasing patients from the hospital. It is now more than a year since the study began, and the Commission has not yet reported—and that delay is being blamed on the M.D.'s for asking for an unprejudiced study.

Financially, the year was bad. Michigan Medi-

cal Service dipped into resources by more than two and one-half million dollars. For the eight years in which Michigan Medical Service offered the \$5,000 ceiling contract, the premium has not changed. At almost every meeting, the Medical Advisory Committee and the Board have boosted the allowance for individual items found or thought to be out of line.

Secondly, the number of services for the year increased by about 100,000, with an equal number of subscribers. Utilization increased more than 10 per cent. We tried to believe the labor lay-off on account of strikes was responsible, but the first three months of 1957 showed no change.

During the year, management and the Board completed studies and plans to extend our proffered services to include out-patient and office surgery, laboratory tests, electrocardiograms, electroencephalograms, tests for basal metabolism, therapeutic and diagnostic x-ray and radiology, consultation, physical medicine, about ten elaborations in a package to be added to the basic contract. Surveys show that great groups of subscribers will never be satisfied unless we can guarantee there will be no extra bills, that the service contracts, in fact, will be that.

Management and the Board have been convinced that medical men rather than laymen must be in direct contact with our doctors, who can talk the same language. L. Fernald Foster, M.D., Secretary of the Michigan State Medical Society, has been carrying all that load on a voluntary basis. Nearly two years of negotiation culminated at the close of 1956. Dr. Foster has been induced to give up his private practice and has become the Medical Executive Director of Michigan Medical Service on a long-term contract. He is also the new president.

Plans were also being made to bring the story directly to the members of Michigan State Medical Society more forcibly than had been possible before—hence the special session of the House of Delegates held on April 27, 1957 the first in more than twenty years.

Yes, it has been a year of trial. We believe some very fundamental results are in the making, in spite of months of anxiety. Many committees have been cooperating and advising. The decision has now been referred to the House of Delegates and all the members.

Do we want to continue and expand prepayment? If we do not, labor is ready to take over

and establish its own supervision and regulation. Also, we must remember the late Senator Vandenberg's caution, "If your prepayment program fails, socialized medicine will follow within a year."

A CHANGED WORLD

The social philosophy well understood by our older generation was a world of postpayment. Almost everything, including medical service, was bought on time or credit. The income limit of \$2,500 per year covered 85 per cent of our families. Insurance had experimented. About a dozen companies, at most, offered health and accident policies which, for a premium of \$100.00 a year, would pay the insured person \$25.00 a week after a certain waiting period and for a specified number of weeks.

The medical profession, in establishing the prepayment philosophy and taking advantage of a war economy (World War II) which is still with us, has changed the habits of our people into a prepayment concept in the medical and health field, where well over 75 per cent of people now carry some form of health insurance, and extending quite generally into business—"cash and carry"; financing most fair-sized purchases through acceptance corporations; establishing a credit to cover expected "needs," including literally thousands of cooperative groups for consistent saving; and established borrowing resources. Now, after only seventeen years, the world of health care is metamorphosed—almost completely changed to a prepaid economy, without worry, but confident of care when serious illness comes.

We may be proud—we are proud—that we have pointed the way to voluntary insurance which has entered the field after being "shown" and that our public, which is no longer satisfied with the protection against health calamities now in effect, is demanding much more extensive service.

This changing world has overtaken us. In the tragic years of the 1930's medical visionaries, medical statesmen, refusing to accept defeat, established a world leadership grafted upon our sacred "calling" of care and protection to our patients. Another generation of doctors is now taking over. A new and much more demanding world is now living in most prosperous times, accustomed to and wanting the impossible. Again the medical profession must assume leadership. We have the

"know-how," and our committees and technicians are prepared. Our Blue Shield can again preserve the American way of life in the medical field and forestall the pressure groups in and out of government who would like to follow Bismarck's great coup—grab power through the most logical means (the health of the people).

The next move must be made by the medical profession. Do we value our traditional unencumbered freedom? We know the demands and needs of our public. We know the answers. Are we yet willing to work together as one entity, one closely knit cohesive band of dedicated soldiers—a working team for the common good? Or will splinter groups refuse for their own selfish reasons and again jeopardize the entire program—the good of ALL the people, not just the medical professional groups?

* * *

Had government during those same trying years also gone on a prepayment basis instead of trying to "spend us into prosperity," what a different world!

DOCTOR, WAS THAT ORDER NECESSARY?

The Editor is constrained to report a circumstance, which is presented for our readers to give the answer.

Within the past three weeks, five different Doctors of Medicine have cited a condition and asked what is to be done. One man was on a hospital record committee and reported records he has seen. Others were staff or medical society officers, and one was a surgeon. This is the story:

There are a few doctors who always order a new patient into the hospital before calling on him; always have a routine half page or more of tests made, including complete blood study, gastrointestinal and x-ray series, electrocardiogram, electroencephalogram, basal metabolism tests, and so on, to an unnecessary cost of a \$100-\$150. The surgeon suggested that it would pay the State Medical Society and Blue Shield to hire a high-class advertising man to teach our own members how to order laboratory and such work for our patients. The morning he talked to the editor, he had just had assigned to him a new house physician in training for surgery. He read the orders the new man had written—half a page of everything, not a one of which cost less than \$5, and altogether amounting to more than \$100.

The surgeon crossed out all but three, which he considered essential.

The surgeon reports that this fault is not confined to young house physicians or candidates for certificate of surgery. Altogether too many referred cases on almost every call have much too many unimportant and needless orders.

He suggests a large placard over each record desk reading: "DOCTOR, WAS THAT ORDER NECESSARY?"

HOSPITAL BEDS AND COSTS

Hospital costs, Blue Cross (not Blue Shield) premium rates, have been increased four times in the past five years, and another boost is scheduled for this summer—co-incident with Michigan Medical Service's first increase since establishing the \$5,000 income ceiling contract.

Over 80 per cent of Hospital costs are wages and salaries. Other costs, such as supplies and replacements, have undergone moderate changes, but the labor world in general is now about to start its tenth round of bargaining. Hospital wages and salaries always have been low and are still far below the general labor standard. Every economist seems to look to the medical profession to hold this line. Under the present hospital standards and policies, we must look for a continuing correspondence with labor in general.

But there is a situation which might help. Many believe our hospital construction plan needs modifying. For many years, we have been building super hospitals with the ultimate in facilities, accommodations and services, believing that a patient ill enough for hospitalization is entitled to "tops." For the acutely ill (surgical and medical), there is no argument, but after a few days in most instances, nursing or custodial care are all that is necessary for several days, or even weeks and months in chronic cases. Such patients do not require super accommodations costing \$30 to \$45 a day. It would seem the time has arrived to build good convenient structures pointed to this concept of care, single rooms, two beds, and small wards with feeding facilities and practical nursing. These buildings could have arrangements with the general hospital so that emergencies could be transferred temporarily. However, they should be under independent management to hold costs down.

Blue Cross could cooperate and pay \$5, \$8 or

\$10, thus reducing the now constantly increasing trend. Such structures would find another usage. Most of our modern homes are small, with absolutely no convenience for convalescent care or even custodial care. Many older people, partially helpless, cancer or paralytic patients could also use these accommodations. They could even relieve a present hospital abuse by providing vacations to many of our harrassed people with problems of grandmothers or grandfathers during periods when other duties call.

We hope someone breaks the ice and provides for one of these so ideally conceived places. The State of Michigan has more than 500 so-called nursing or rest homes which, in many instances, are unworthy of the name.

Detroit is developing a new medical center encompassing four hospitals, Harper, old Grace, Women's and Children's. What a wonderful opportunity to pioneer in a sadly needed type of quasi-medical service.

One of the hospitals in Battle Creek has announced extensive improvements with some new beds. Such plans are undoubtedly in the making in several places. More super hospital beds are expensive. Providing the suggested type of convalescent bed would release about an equal number of the more expensive beds at a mere fraction of their cost, also could tend to lessen Blue Cross costs.

WHO OWNS AMERICA?

General Motors is one of the world's greatest and most powerful corporations, doing approximately \$12 billion worth of business each year, of which more than 50 per cent goes to its 21,000 suppliers. It employs 599,000 persons and pays them \$96.63 per week, yearly average. General Motors has 656,000 shareholders who, by cooperative effort and pooling of money interests, give constant and remunerative employment to five men for every six of themselves. For every \$1,000, these stockholders have invested, they, through their cooperative effort, have received \$50 in dividend income, but have paid \$175 in taxes—income sales or excise. Such is the power of *united* effort. By themselves, these people would have failed utterly to approach this accomplishment.

Such is the stuff of which our American way of life was built. Only by constant watchfulness and "meeting of minds" has General Motors de-

veloped. Our State Medical Society may well consider its past and future. General Motors started slowly and built. Michigan State Medical Society, in the 1930's, found a group of conditions which threatened our way of life. Cohesive and concerted effort met the challenge and in so doing built Michigan Medical Service, a great corporation consisting of six participators out of every seven of our members. That corporation was founded to meet the calamitous needs of our patients and incidentally to forward our own ideals. Success in both followed.

New economic conditions, new ambitions to rule, new methods of attaining political or economic power are demanding another period of self-searching by the 6,000 or more doctors whose very livelihood is at stake. The ideals must be arrived at democratically, but once adopted, this time there must be no "free riders." There must be seven out of every seven who combine to assure our subscribers that promises will be fulfilled.

CORRECTION

In THE JOURNAL for March, 1957, the Report of the MSMS Rheumatic Fever Control Committee on page 375, is a tabulation in which the first column with the heading "Center*" was dropped down one line, thus placing the named Centers one line below where they actually should be.

EDITOR

MSMS ANNUAL MEETING

September 25-26-27, 1957

Civic Auditorium, Pantlind Hotel

Grand Rapids

→ Make your hotel reservation now. ←

Michigan State Medical Society

The Ninety-second Annual Session



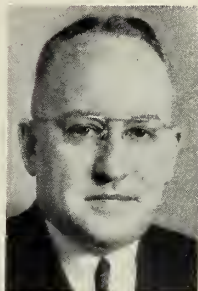
D. BRUCE WILEY, M.D.
Utica
Council Chairman



ARCH WALLS, M.D.
Detroit
President



K. H. JOHNSON, M.D.
Lansing
Speaker



L. FERNALD FOSTER, M.D.
Bay City
Secretary

OFFICIAL CALL

The Michigan State Medical Society will convene in Annual Session in Grand Rapids, Michigan, September 23-24-25-26-27, 1957. The provisions of the Constitution and By-Laws and the Official Program will govern the deliberations.

ARCH WALLS, M.D.
President

D. BRUCE WILEY, M.D.
Council Chairman

K. H. JOHNSON, M.D.
Speaker

J. J. LIGHTBODY, M.D.
Vice Speaker

Attest:

L. FERNALD FOSTER, M.D.
Secretary



J. J. LIGHTBODY, M.D.
Detroit
Vice Speaker

TWO-DAY SESSION OF HOUSE OF DELEGATES

September 23-24, 1957

The 1957 House of Delegates of the Michigan State Medical Society will hold a two-day session beginning Monday, September 23, at 10:00 a.m. The business of the House of Delegates will be transacted in the Ball room of the Pantlind Hotel, Grand Rapids.

The House will meet also on Monday, September 23, at 2:00 p.m. and at 8:00 p.m. and on Tuesday, September 24, at 9:30 a.m. and at 8:00 p.m.

The intervals between meetings of the House of Dele-

gates have been spaced to permit the Reference Committees ample time to transact all business referred to them.

SEATING OF DELEGATES

"Any Delegate-Elect not present to be seated at the hour of call of the first meeting may be replaced by the accredited Alternate next on the list as certified by the Secretary of the component County Society involved."—MSMS By-Laws, Chapter 8, Section 6.

OUTLINE OF 1957 ASSEMBLY AND SECTION SPEAKERS

92ND ANNUAL SESSION MSMS

Grand Rapids, September 25-26-27, 1957

Time	Wednesday September 25, 1957	Thursday September 26, 1957	Friday September 27, 1957
A.M.			
9:00- 9:30	<i>Obstetrics</i> CARL T. JAVERT, M.D. New York	<i>Surgery</i> THEODORE O. WINSHIP, M.D. Washington, D. C.	<i>General Practice</i> E. KEITH HAMMOND, M.D. Paoli, Ind.
9:30-10:00	<i>Gynecology</i> HERBERT E. SCHMITZ, M.D. Chicago	<i>Surgery</i> OSCAR T. CLAGETT, M.D. Rochester, Minn.	<i>Pathology</i> DAVID C. DAHLIN, M.D. Rochester, Minn.
10:00-11:00	INTERMISSION TO VIEW EXHIBITS	INTERMISSION TO VIEW EXHIBITS	INTERMISSION TO VIEW EXHIBITS
11:00-11:30	<i>Pediatrics</i> EDWARD PRESS, M.D. New York	<i>Otolaryngology</i> OSCAR J. BECKER, M.D. Chicago	<i>Dermatology & Syphilology</i> CHARLES R. REIN, M.D. New York
11:30-12:00	<i>Urology</i> EDWIN L. PRIEN, M.D. Brookline, Mass.	<i>Public Health & Preventive Medicine</i> JOHN D. PORTERFIELD, M.D. Washington, D. C.	<i>Dermatology</i> JAMES W. BURKS, M.D. New Orleans, La.
P.M.			
12:00- 1:00	DISCUSSION CONFERENCE	DISCUSSION CONFERENCE	DISCUSSION CONFERENCE
2:00- 2:30	<i>Pediatrics</i> DOUGLAS T. DAVIDSON, JR., M.D. Boston	<i>Beaumont Lecture</i> RAYMOND J. JACKMAN, M.D. Rochester, Minn.	<i>Nervous & Mental Diseases</i> ADELAID M. JOHNSON, M.D. Rochester, Minn.
2:30- 3:00	<i>Biddle Lecture</i> WALTER P. REUTHER Detroit	<i>Ophthalmology</i> PETER C. KRONFELD, M.D. Chicago	and LEO H. BARTEMEIER, M.D. Baltimore, Md.
3:00- 4:00	INTERMISSION TO VIEW EXHIBITS	INTERMISSION TO VIEW EXHIBITS	3:00-3:30 FINAL INTERMISSION TO VIEW EXHIBITS
4:00- 4:30	<i>Obstetrics</i> PAUL A. BOWERS, M.D. Philadelphia	<i>Occupational Health</i> FRANK J. AYD, JR., M.D. Baltimore	3:30-4:00 <i>Medicine</i> WALTER L. PALMER, M.D. Chicago
4:30- 5:00	<i>Radiology</i> MAX CUTLER, M.D. Beverly Hills, Calif.	<i>Surgery</i> ORMAND C. JULIAN, M.D. Chicago	4:00-6:00 <i>Medicine Panel</i> (Including Medical Section Meeting) <i>What's New in Heart Disease</i> ROBERT L. NOVY, M.D. Detroit, Moderator SAMUEL BELLET, M.D. Philadelphia RICHARD J. BING, M.D. Birmingham, Ala. HANS H. HECHT, M.D. Salt Lake City, Utah ROBERT J. SCHNECK, M.D. Detroit
5:00- 6:00	FIVE SECTION MEETINGS	SIX SECTION MEETINGS	FIVE SECTION MEETINGS
	<i>Occupational Health</i> FRANK J. AYD, JR., M.D. Baltimore T. I. BOILEAU, M.D. Detroit	<i>Gastroenterology-Proctology Panel</i> RAYMOND J. JACKMAN, M.D. Rochester, Minn. LEO S. FIGIEL, M.D. Detroit DON W. MCLEAN, M.D. Detroit C. ALLEN PAYNE, M.D. Grand Rapids GERALD A. WILSON, M.D. Detroit	<i>Medicine</i> (See Program immediately above)
	<i>Obstetrics-Gynecology</i> HERBERT E. SCHMITZ, M.D. Chicago	<i>Ophthalmology</i> PETER C. KRONFELD, M.D. Chicago	<i>Dermatology-Syphilology</i> JAMES W. BURKS, M.D. New Orleans, La.
	<i>Pediatrics</i> STUART M. FINCH, M.D. Ann Arbor	<i>Public Health & Preventive Medicine</i> JOHN D. PORTERFIELD, M.D. Washington, D. C.	<i>Pathology</i> DAVID C. DAHLIN, M.D. Rochester, Minn.
	<i>Radiology</i> MAX CUTLER, M.D. Beverly Hills, Calif.	<i>Surgery</i> OSCAR T. CLAGETT, M.D. Rochester, Minn. ORMAND C. JULIAN, M.D. Chicago THEODORE O. WINSHIP, M.D. Washington, D. C.	<i>Nervous & Mental Diseases Panel</i> ADELAID M. JOHNSON, M.D. Rochester, Minn. and LEO H. BARTEMEIER, M.D. Baltimore, Md.
	<i>Urology</i> EDWIN L. PRIEN, M.D. Brookline, Mass.	<i>General Practice</i> BENJAMIN JEFFRIES, M.D. Detroit	<i>Anesthesiology</i> (To be selected)
		<i>Otolaryngology</i> OSCAR J. BECKER, M.D. Chicago	END OF ANNUAL SESSION
	7:00 p.m. Officers Night Banquet	10:30 p.m. to 1:30 a.m. State Society Night MSMS Entertainment	

Michigan State Medical Society

The Ninety-second Annual Session

PANTLIND HOTEL, GRAND RAPIDS
SEPTEMBER 25-26-27, 1957

INFORMATION

- **GRAND RAPIDS WILL BE HOST TO MSMS IN SEPTEMBER, 1957**
- **MSMS HOUSE OF DELEGATES** convenes Monday, September 23, at 10:00 a.m., Ball Room, Pantlind Hotel. It will hold three meetings on Monday and two meetings on Tuesday, September 24.
- **THE PROGRAM OF THE ASSEMBLY** for the 92nd Annual Session of the Michigan State Medical Society lists guest speakers from all parts of the United States. They are the usual stars in the medical world who always grace the podium at the annual conventions of the Michigan State Medical Society; they insure a valuable concentrated refresher course in all phases of medicine and surgery for the busy practitioners of Michigan, of neighboring states and the Province of Ontario, on September 25-26-27.
- **REGISTRATION**, Tuesday afternoon through Friday afternoon, September 24-27, Civic Auditorium. Advance registration—on Tuesday and early Wednesday morning—will save your time. Present your State Medical Society, American Medical or Canadian Medical Association membership card to expedite registration.
- **NO REGISTRATION FEE FOR STATE MEDICAL SOCIETY AND CMA MEMBERS.**
Doctors of Medicine, who are not members of their state medical society or of the Canadian Medical Association, will be accorded the privileges of the MSMS Annual Session upon payment of a \$25.00 registration fee.
- **REGISTER AS SOON AS YOU ARRIVE. ADMISSION BY BADGE ONLY.**
- **ALL SUBJECTS** at the MSMS Annual Session are applicable to clinical medicine. They stress diagnosis and treatment, usable in everyday practice.
- **POSTGRADUATE CREDITS** given to every MSMS member who attends MSMS Annual Session.
- **SIX ASSEMBLIES**—16 Section Meetings—Three Discussion Conferences, all on September 25-26-27.
- **A DISCUSSION CONFERENCE**—featuring the guest speakers of each day—will be held daily from 12:00 noon to 1:00 p.m. in the Black and Silver Ball Room of the Civic Auditorium. Audience participation invited.
- **SECTION MEETINGS** at 5:00 to 6:00 p.m. will follow the daily Assemblies.
- **PAPERS WILL BEGIN AND END ON TIME.** The MSMS scientific meeting always features by-the-clock promptness and regularity.
- **TECHNICAL AND SCIENTIFIC EXHIBITS** will contain much of interest and value. Two daily intermissions to view the exhibits have been arranged.
- **C. ALLEN PAYNE, M.D., GRAND RAPIDS**, is Chairman of the Committee on Arrangements for the 1957 Annual Session.

• BANQUET, WEDNESDAY, SEPTEMBER 25.

The Officers Night Banquet—to which all MSMS members and their ladies are cordially invited—will be held in the Ball Room of the Pantlind Hotel, Grand Rapids. Reception, 7:00 p.m.; banquet, 8:00 p.m. Sponsored by the Michigan State Medical Society and its Woman's Auxiliary.

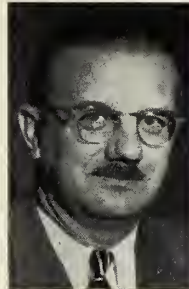
THREE DISCUSSION CONFERENCES



A. C. FURSTENBERG, M.D.
Ann Arbor
Leader on Wednesday,
September 25, 1957



PERRY C. GITTINS, M.D.
Detroit
Leader on Friday,
September 27, 1957



C. ALLEN PAYNE, M.D.
Grand Rapids
Leader on Thursday,
September 26, 1957

Three quiz periods will be held, Wednesday-Thursday-Friday, September 25-26-27, in the Black and Silver Ballroom of the Civic Auditorium, Grand Rapids, 12:00 noon to 1:00 p.m., with all the guest speakers of the day on the platform.

An opportunity to ask questions concerning the presentations of the guest essayists, or to discuss an interesting case with them, is provided at these daily Discussion Conferences.

- **CABARET-STYLE DANCE AND ENTERTAINMENT**, with the compliments of the Michigan State Medical Society, will be held in the Ball Room of the Pantlind Hotel on Thursday evening, September 26. All who register will receive a card of admission and they and their ladies are cordially invited to attend.
- **THE WOMAN'S AUXILIARY** to the Michigan State Medical Society will present an attractive social and business program at the Pantlind Hotel, Grand Rapids. The wife of every MSMS member is cordially invited to attend.
- **THE MICHIGAN STATE MEDICAL ASSISTANTS SOCIETY** will hold its meeting at the Hotel Manger Rowe, Grand Rapids, on Wednesday and Thursday, September 25-26.
- **MEMBERS OF MICHIGAN MEDICAL SERVICE** will meet in annual session, Tuesday, September 24, at 2:00 p.m. This meeting will follow the annual MMS luncheon to be held in the Ball Room, Pantlind Hotel.

SCIENTIFIC ASSEMBLY
Wednesday-Thursday-Friday
September 25-26-27, 1957

Michigan State Medical Society

The Ninety-second Annual Session

PANTLIND HOTEL, GRAND RAPIDS, SEPTEMBER 23-24, 1957

HOUSE OF DELEGATES—ORDER OF BUSINESS*

MONDAY, SEPTEMBER 23

Ball Room, Pantlind Hotel, Grand Rapids

10:00 a.m.—First meeting

1. Call to Order by Speaker
2. Report of Committee on Credentials
3. Roll Call
4. Welcome
 - (a) Hon. Paul G. Goebel, Grand Rapids, Mayor, City of Grand Rapids
 - (b) Hon. Gerald R. Ford, Jr., Grand Rapids, Congressman, Fifth District of Michigan
5. Appointment of Reference Committees
 - (a) On Officers' Reports
 - (b) On Reports of The Council
 - (c) On Reports of Standing Committees
 - (d) On Reports of Special Committees
 - (e) On Constitution and By-Laws
 - (f) On Resolutions
 - (g) On Special Memberships
 - (h) On Rules and Order of Business
 - (i) On Legislation and Public Relations
 - (j) On Hygiene and Public Health
 - (k) On Medical Service and Prepayment Insurance
 - (l) On Miscellaneous Business
 - (m) On Executive Session
 - (n) On National Defense and Disaster Planning
6. Speaker's Remarks—K. H. Johnson, M.D., Lansing
7. President's Remarks—Arch Walls, M.D., Detroit
8. President-Elect's Remarks—G. W. Slagle, M.D., Grand Rapids
9. Annual and Supplemental Reports of The Council—D. Bruce Wiley, M.D., Utica, Chairman of The Council
10. Report of Delegates to American Medical Association—W. A. Hyland, M.D., Grand Rapids, Chairman
11. Brief of Annual Report of Woman's Auxiliary—Mrs. A. C. Stander, Saginaw, President
12. Brief of Annual Report of Michigan State Medical Assistants Society—Miss Doris Jarrad, Lansing
13. Brief of Annual Report of Michigan Medical Service—
(See printed report)
14. Selection of Michigan's Foremost Family Physician
Fifty-year Awards

*See the Constitution, Articles IV, VII and XII, and the By-Laws, Chapter 8 on "House of Delegates."

MONDAY, SEPTEMBER 23

Ball Room, Pantlind Hotel, Grand Rapids

2:00 p.m.—Second meeting

15. Supplemental Report of Committee on Credentials
16. Roll Call
17. Resolutions**
18. Reports of MSMS Standing Committees
 - A. Committee on Postgraduate Medical Education
 - B. Preventive Medicine Committee
 - (1) Committee on Rheumatic Fever Control
 - (2) Cancer Control Committee
 - (3) Maternal Health Committee
 - (4) Venereal Disease Control Committee
 - (5) Tuberculosis Control Committee
 - (6) Industrial Health Committee
 - (7) Mental Health Committee
 - (8) Child Welfare Committee (and Subcommittees)
 - (9) Iodized Salt Committee
 - (10) Geriatrics Committee (and Subcommittees)
 - C. Public Relations Committee (and Subcommittees)
 - D. Ethics Committee
 - E. Legislative Committee
19. Reports of Special Committees
 - A. Beaumont Memorial Committee
 - B. Scientific Radio Committee
 - C. Advisory Committee to Woman's Auxiliary
 - D. Advisory Committee to Michigan State Medical Assistants Society
 - E. Committee to Study MSMS Financial Structure (a committee of the House of Delegates)Reports of the Committees of The Council, including Committee on Scientific Work, are included in Annual Report of The Council.

MONDAY, SEPTEMBER 23

Ball Room, Pantlind Hotel, Grand Rapids

8:00 p.m.—Third Meeting

20. Supplementary Report of Committee on Credentials
21. Roll Call
22. Unfinished Business
23. New Business
24. Reports of Reference Committees
 - (a) On Officers' Reports
 - (b) On Reports of The Council
 - (c) On Reports of Standing Committees
 - (d) On Reports of Special Committees

**All resolutions, special reports, and new business shall be presented in writing in triplicate (By-Laws, Chapter 8, Section 10-m).

- (e) On Constitution and By-Laws
- (f) On Resolutions
- (g) On Special Memberships
- (h) On Rules and Order of Business
- (i) On Legislation and Public Relations
- (j) On Hygiene and Public Health
- (k) On Medical Service and Prepayment Insurance
- (l) On Miscellaneous Business
- (m) On Executive Session
- (n) On National Defense and Disaster Planning

TUESDAY, SEPTEMBER 24

Ball Room, Pantlind Hotel, Grand Rapids

9:30 a.m.—Fourth Meeting

- 25. Supplementary Report of Committee on Credentials
- 26. Roll Call
- 27. Unfinished Business
- 28. New Business
- 29. Supplementary Reports of Reference Committees

TUESDAY, SEPTEMBER 24

Ball Room, Pantlind Hotel, Grand Rapids

8:00 p.m.—Fifth Meeting

- 30. Supplementary Report of Committee on Credentials
- 31. Roll Call
- 32. Unfinished Business
- 33. Supplemental Report of The Council
- 34. Supplementary Reports of Reference Committees
- 35. Elections
 - (a) Councilors:
 - 7th District—H. B. Zemmer, M.D., Lapeer—Incumbent
 - 8th District—L. C. Harvie, M.D., Saginaw—Incumbent
 - 9th District—G. B. Saltonstall, M.D., Charlevoix—Incumbent
 - 10th District—W. S. Stinson, M.D., Bay City—Incumbent
 - (b) Delegates to American Medical Association
 - W. A. Hyland, M.D., Grand Rapids—Incumbent
 - J. S. DeTar, M.D., Milan—Incumbent
 - C. I. Owen, M.D., Detroit—Incumbent
 - (c) Alternate Delegates to American Medical Association
 - W. W. Babcock, M.D., Detroit—Incumbent
 - E. F. Sladek, M.D., Traverse City—Incumbent
 - O. J. Johnson, M.D., Bay City—Incumbent
 - (d) President-Elect
 - (e) Speaker of the House of Delegates
 - (f) Vice-Speaker of the House of Delegates
- 36. Adjournment

ANNUAL SESSION APPOINTMENTS

Chairman of Arrangements

C. Allan Payne, M.D., Grand Rapids

House of Delegates Press Relations Committee

K. H. Johnson, M.D., Lansing, *Chairman*

L. Fernald Foster, M.D., Detroit

J. J. Lightbody, M.D., Detroit

D. W. Thorup, M.D., Benton Harbor

C. L. Weston, M.D., Owosso

Scientific Press Relations Committee

P. W. Kniskern, M.D., Grand Rapids, *Chairman*

H. G. Benjamin, M.D., Grand Rapids

F. C. Brace, M.D., Grand Rapids

A. B. Gwinn, M.D., Hastings

**HOTEL RESERVATIONS
MICHIGAN STATE MEDICAL SOCIETY**

92nd Annual Session
Grand Rapids, September 25-26-27, 1957

The reservation blank below is for your convenience in making your hotel reservations in Grand Rapids. Please send your application to the Committee on Hotels for MSMS Convention, Pantlind Hotel, Grand Rapids, Michigan. Mailing your application now will be of material assistance in securing hotel accommodations.

As very few singles are available, registrants are requested to co-operate with the Committee on Hotels by sharing a room with another registrant, when convenient.

Committee on Hotels,
Michigan State Medical Society
c/o Pantlind Hotel
Grand Rapids, Michigan
Please make hotel reservation(s) as indicated below:

_____ Single Room(s) _____ persons

_____ Double Room(s) for _____ persons

_____ Twin-Bedded Room(s) for _____ persons

Arriving September _____ hour _____ A.M. _____ P.M.

Leaving _____ hour _____ A.M. _____ P.M.

Hotel of First Choice: _____

Second Choice: _____

Names and addresses of all applicants including persons making reservation:

Name	Address	City	State
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

Date _____ Signature _____

Address _____ City _____

ADVANCE REGISTRATION OF DELEGATES

Sunday, September 22, 1957

8:00 to 10:00 p.m.

Lobby of Pantlind Hotel

MSMS HOUSE OF DELEGATES, 1957

Delegates and Alternates

(Names of Alternates appear in italics)

OFFICERS

K. H. Johnson, M.D., 1116 Mich Natl. Tower, Lansing
Speaker

J. J. Lightbody, M.D., 501 David Whitney Bldg., Detroit
Vice Speaker

L. Fernald Foster, M.D., 441 E. Jefferson, Detroit
Secretary

W. S. Jones, M.D., 1146 Tenth Avenue, Menominee
Immediate Past President

ALLEGAN

L. F. Brown, M.D., 133 E. Allegan, Otsego
E. B. Johnson, M.D., 412 Water St., Allegan

ALPENA-ALCONA-PRESQUE ISLE

E. S. Parmenter, M.D., P.O. Box 192, Alpena
J. E. Spens, M.D., 125 N. Second Ave., Alpena

BARRY

A. B. Gwinn, M.D., City Bank Bldg., Hastings
J. A. Millard, M.D., 303 Broadway, Middleville

BAY-ARENAC-IOSCO

O. J. Johnson, M.D., 207 N. Walnut, Bay City
D. A. Bowman, M.D., 101 W. John, Bay City
W. G. Gamble, M.D., Mercy Hospital, Bay City
S. A. Cosens, M.D., 101 W. John St., Bay City

BERRIEN

Noel J. Hershey, M.D., 122 Grant St., Niles
D. W. Thorup, M.D., 610 Fidelity Bldg., Benton Harbor
H. J. Klos, M.D., 2121 Niles St., St. Joseph
F. H. Lindenfeld, M.D., 8 N. St. Joseph, Niles

BRANCH

R. J. Fraser, M.D., 22 W. Pearl St., Coldwater
R. M. Leitch, M.D., 304 N. Broadway, Union City

CALHOUN

James W. Hubly, M.D., 25 W. Michigan Ave., Battle Creek
Harvey C. Hansen, M.D., 65 W. Michigan Ave., Battle Creek
George T. Kelleher, M.D., 65 W. Michigan Ave., Battle Creek
Robert E. Fisher, M.D., 1501 W. Michigan Ave., Battle Creek

CASS

S. L. Loupee, M.D., 110 W. Division St., Dowagiac
U. M. Adams, M.D., Marcellus

CHIPPEWA-MACKINAC

W. F. Mertaugh, M.D., Central Savings Bank Bldg., Sault Ste. Marie
E. S. Rhind, M.D., 300 Court St., Sault Ste. Marie

CLINTON

Franklin W. Smith, M.D., 105 S. Ottawa St., St. Johns
James M. Grost, M.D., 303 E. Walker St., St. Johns

DELTA-SCHOOLCRAFT

James R. Dehlin, M.D., 8 S. Eleventh St., Gladstone
James H. Fyvie, M.D., 202 S. Cedar, Manistique

DICKINSON-IRON

D. R. Smith, M.D., 105 W. A. St., Iron Mountain
E. R. Addison, M.D., 412 Superior St., Crystal Falls

EATON

B. P. Brown, M.D., 339 S. Cochran, Charlotte
R. E. Landick, M.D., 111 S. Cochran, Charlotte

GENESEE

J. E. Livesay, M.D., 621 Mott Foundation Bldg., Flint
F. D. Johnson, M.D., 312 Paterson Bldg., Flint
C. W. Colwell, M.D., 706 Citizens Bank Bldg., Flint
F. W. Baske, M.D., 923 Maxine St., Flint
G. E. Anthony, M.D., 1015 Detroit St., Flint
Kendall Hooper, M.D., 714 Beech St., Flint
J. E. Wentworth, M.D., 1651 Chevrolet Ave., Flint
L. G. Bateman, M.D., 1928 Lewis St., Flint
John C. Benson, M.D., 402 W. Second St., Flint
W. F. Buchanan, M.D., 104 W. Caroline St., Fenton

GOGBIC

J. E. McEnroe, M.D., Newport Hospital, Ironwood
A. C. Gorilla, M.D., Ironwood

GRAND-TRAVERSE-LEELANAU-BENZIE

D. G. Pike, M.D., 876 E. Front St., Traverse City
C. E. Lemen, M.D., 216½ E. Front St., Traverse City

GRATIOT-ISABELLA-CLARE

E. S. Oldham, M.D., Breckenridge
(No alternate elected to date.)

HILLSDALE

A. W. Strom, M.D., Hillsdale
L. W. Day, M.D., Jonesville

HOUGHTON-BARAGA-KEWEENAW

P. S. Sloan, M.D., 609 Sheldon Ave., Houghton
L. C. Aldrich, M.D., 301 Quincy St., Hancock

HURON

C. W. Oakes, M.D., Harbor Beach
C. A. Scheurer, M.D., Pigeon

INGHAM

K. H. Johnson, M.D., 1116 Michigan National Tower, Lansing
H. W. Harris, M.D., 609 N. Washington, Lansing
J. M. Wellman, M.D., 301 Seymour, Lansing
F. L. Troost, M.D., 4341 W. Delhi, Holt
L. A. Drolett, M.D., 3526 West Saginaw, Lansing
Milton Shaw, M.D., 320 Townsend, Lansing
K. W. Toothaker, M.D., 930 N. Washington, Lansing
R. E. Kalmbach, M.D., 301 Seymour, Lansing

IONIA-MONTCALM

R. E. Rice, M.D., Greenville
J. L. Tromp, M.D., Lake Odessa

JACKSON

W. A. Wickham, M.D., 420 W. Michigan, Jackson
H. W. Porter, M.D., 505 Wildwood, Jackson
C. R. Lenz, M.D., 405 First St., Jackson
Jack P. Bentley, M.D., 404 MacNeal, Jackson

KALAMAZOO

Wm. A. Scott, M.D., 208 Bronson Medical Center, Kalamazoo
Sherman E. Andrews, M.D., 224 E. Cedar, Kalamazoo
Frederick C. Ryan, M.D., 507 S. Burdick, Kalamazoo
Martin D. Verhage, M.D., 228 W. Cedar, Kalamazoo
Robert R. Dew, M.D., 312 Bronson Medical Center, Kalamazoo
James G. Malone, M.D., 420 John St., Kalamazoo

ENT

M. Burroughs, Jr., M.D., 11 S. Wilson, Grandville
R. Brink, M.D., 110-116 E. Fulton, Grand Rapids
S. Alfenito, M.D., 26 Sheldon S.E., Grand Rapids
A. Rasmussen, M.D., 1810 Wealthy S.E., Grand Rapids
C. Beets, M.D., 124 E. Fulton, Grand Rapids
T. Boet, M.D., 2339 Wyoming S.W., Grand Rapids
W. DeBoer, M.D., 26 Sheldon S.E., Grand Rapids
R. Vanden Berg, M.D., 26 Sheldon S.E., Grand Rapids
L. Kessler, M.D., 1610 Robinson Rd. S.E., Grand Rapids
F. Failing, Sr., M.D., 110-116 E. Fulton, Grand Rapids
J. Hoffs, M.D., 26 Sheldon S.E., Grand Rapids
C. Boelkins, M.D., 125-7 Fountain S.E., Grand Rapids
A. Notier, M.D., 26 Sheldon S.E., Grand Rapids
R. VanZwalenburg, M.D., 833 Lake Dr. S.E., Grand Rapids

LAPEER

J. O'Brien, M.D., Nepessing St., Lapeer
Thomas K. Buchanan, M.D., Imlay City

ENAWEE

C. Wilson, M.D., 108 N. Jackson St., Clinton
H. Hewes, M.D., 146 E. Maumee, Adrian

IVINGSTON

C. Hill, M.D., 116 N. Michigan, Howell
E. May, M.D., 203 N. Court St., Howell

UCE

C. Adams, M.D., Newberry State Hospital, Newberry
No alternate elected to date)

IACOMB

dney Scher, M.D., 132 Cass Ave., Mt. Clemens
Edward G. Siegfried, M.D., 91 Cass Ave., Mt. Clemens
James W. Jewell, M.D., 18215 Utica Road, Roseville
Henry C. Wellard, M.D., New Baltimore

MANISTEE

Robert R. Garneau, M.D., Mercy Community Hospital, Manistee
B. Miller, M.D., 425 River St., Manistee

MARQUETTE-ALGER

S. Narotzky, M.D., Miracle Circle, Ishpeming
R. Acocks, M.D., Morgan Heights San., Marquette

IASON

G. Bacon, M.D., Scottville
B. Boldyreff, M.D., Custer

IECOSTA-OSCEOLA-LAKE

Paul Ivkovich, M.D., 111 S. Chestnut, Reed City
Edward H. Kowaleski, M.D., Remus

IENOMINEE

R. Heidenreich, M.D., Daggett
R. Brukardt, M.D., 534 1st Street, Menominee

IDLAND

Carol L. Gordon, M.D., 1423 Clover Lane, Midland
Martin J. Ittner, M.D., 217 N. Saginaw, Midland

IONROE

Newton Kelso, M.D., 127 East Front St., Monroe
A. Frary, M.D., 423 East Elm Ave., Monroe

IUSKEGON

W. Scholle, M.D., 2500 Peck St., Muskegon Heights
R. Boyd, M.D., 1735 Peck St., Muskegon
M. Busard, M.D., 503 Liberty Life Bldg., Muskegon
H. Tyler, M.D., 1435 Peck St., Muskegon

UNE, 1957

NEWAYGO

J. Paul Klein, M.D., 16 West Sheridan St., Fremont
Robert E. Paxton, M.D., 40 West Sheridan, Fremont

NORTH CENTRAL

E. H. Rodda, M.D., 308 Michigan Ave., Grayling
George L. Schaiberger, M.D., 707 W. Hought, West Branch

NORTH MICHIGAN

J. R. Rodger, M.D., Bellaire
G. A. Drake, M.D., Petoskey

OAKLAND

P. E. Sutton, M.D., 629 Washington Square Bldg., Royal Oak
H. A. Furlong, M.D., 940 Riker Bldg., Pontiac
E. B. Cudney, M.D., Pontiac Motor Div., Pontiac
W. J. Zimmerman, M.D., 258 Washington Square Bldg., Royal Oak
E. W. Bauer, M.D., 23055 John R., Hazel Park
John M. Markley, M.D., 849 W. Huron, Pontiac
C. G. Burke, M.D., 1022 Riker Bldg., Pontiac
Norman F. Gehringer, M.D., 880 Woodward, Pontiac
Felix J. Kemp, M.D., 880 Woodward, Pontiac
F. M. Adams, M.D., 600 N. Woodward, Birmingham
Paul T. Lahti, M.D., 325 Washington Square Bldg., Royal Oak
R. W. Bullard, M.D., Jr., 20 S. Main St., Clarkston

OCEANA

W. G. Robinson, M.D., 219 State Street, Hart
(No alternate elected to date)

ONTONAGON

W. F. Strong, M.D., Ontonagon
C. R. Lahti, M.D., Ontonagon

OTTAWA

Otto VanderVelde, M.D., 35 W. 8th St., Holland
K. N. Wells, M.D., 119 W. Savidge St., Spring Lake

SAGINAW

E. C. Galsterer, M.D., 124 S. Jefferson, Saginaw
J. P. Markey, M.D., 808 N. Michigan, Saginaw
A. C. Stander, M.D., 1411 Court St., Saginaw
A. K. Cameron, M.D., 409 1st Savings Loan Bldg., Saginaw
F. E. Luger, M.D., 303 N. Jefferson, Saginaw
H. T. Caumartin, M.D., 404 S. Warren, Saginaw

SANILAC

K. T. McGunegle, M.D., Sandusky
R. J. Winfield, M.D., Marlette

SHIAWASSEE

Claude L. Weston, M.D., Matthews Bldg., Owosso
John E. Harroun, M.D., Matthews Bldg., Owosso

ST. CLAIR

Joseph F. Beer, M.D., 104 North Riverside, St. Clair
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ST. JOSEPH

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MSMS House of Delegates

Special Session of April 27, 1957

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MSMS House of Delegates

Special Session, April 27, 1957

SATURDAY MORNING SESSION April 27, 1957

The first meeting of a special called session of the House of Delegates of the Michigan State Medical Society, held at 441 East Jefferson Street, Detroit, Michigan, on Saturday, April 27, 1957, convened at 10:25 a.m., K. H. Johnson, M.D., Speaker of the House, presiding.

I. INTRODUCTION

By Speaker K. H. Johnson, M.D.

Members of the House of Delegates, Alternates, County Society Presidents and Secretaries, Members of The Council, Officers of the State Society, Officers of Michigan Medical Service, Members of the Press, Guests, Ladies and Gentlemen:

This special session of the House of Delegates is, in my mind, another milestone in the history of forward progress of the Michigan State Medical Society. Those of us whose duty it is to sit month after month listening, weighing, considering and disposing of the mass of information that comes before The Council and its Executive Committee are keenly aware of the fierce pressures from many directions which are exerting their influence upon the profession of medicine and the public seeks to serve. It is highly commendable that a committee of The Council saw fit to request that The Council call this special session and that The Council, by unanimous vote, requested that the meeting be called.

It is essential that each member of this House be thoroughly familiar with the responsibilities that are his as he votes for the principles by which this State Society and the profession of medicine shall be guided in the days and months and years ahead. It is no small responsibility and surmounts any individual gain or specific group satisfaction. It is my strong personal conviction that the future history of the profession of medicine is going to be written by this House of Delegates during the next two years.

With this in mind, I call this special meeting to order. May we have a report from the Credentials Committee.

A. B. GWINN, M.D. [Barry]: Mr. Speaker, in this special session of the House of Delegates there are ninety delegates seated, and 50 per cent of these are not from any one county.

THE SPEAKER: I therefore declare a quorum is present, and we shall proceed with the business of the day.

I should like to explain to you that everyone in this room is welcome.

The purpose of this special session, as it was presented in the call, is to acquaint the members of the House and, in turn, all members of the State Society, with certain issues facing the profession in regard to the future of prepaid health insurance in this State. This meeting was requested by The Council, according to Section 4, Chapter VIII of the Bylaws, which reads as follows:

"The House of Delegates shall meet annually at the time and place of the meeting of this State Society as a whole, as when it meets in general session, and may hold such number of meetings as the House may determine if its business require, recessing from day to day as may be necessary to complete its business, and specifying its own time for the holding of its meetings.

"The House of Delegates may also be called into session at any time by the Speaker upon a two-thirds vote of The Council or on petition of 25 per cent of the delegates. The purpose of such special session shall be stated in the notice to call."

I would like to extend my personal thanks and, I am sure, the thanks of the members of the House of Delegates, for the very excellent work of the administrative staff, the members of the panel, the Councilors and the officers of this Society in their efforts to present to you a concise bit of information which you will find in the brochure that has been handed to you. Purposely there are wide margins on the pages so that you may make side notes as we go along.

I think they have done an excellent job, and I also would like to thank the Credentials Committee for its work in getting here early today and organizing the set-up. A great deal of very sincere energy and effort has gone into the matter.

We have made every effort to handle things so that there will be no missed opportunities. Loud speakers will be at your service on the floor. The speakers will use this rostrum. We have a stenotypist who is taking down everything that is said, and we have a tape recorder that is taking down how it is said.

You will notice that the meeting is divided into, first, an informational period. At this time we will have men who will present the history and philosophy of prepaid medical insurance in this State, and we will have another group who will present the various attempts that have been made to solve our problem. Then we will have some statements of facts from an insurance standpoint as to where we are today and what the future holds, providing we choose this or that direction.

Following this informational, we will have a question and answer period. Large question cards will be passed out to members of the House. Please bear with me when I say that only members of the House may use these cards, but of course if there is some person in the audience who would like to ask a question through a delegate it is perfectly proper for him to do so.

Will you write your question on the card legibly. You may ask your question of a specific member of the panel, or you may simply ask it in a general way. You may or may not sign your name, as you wish. Please write your questions as the program proceeds. We are trying not to keep you here all night, and I am sure that if questions come to your mind and you jot them down at the time, it will facilitate somewhat the speed of the program.

Immediately following the question and answer period there will be an opportunity for motions and resolutions to be presented. I believe it is perfectly obvious to everyone here that for this House in a special session, to take definitive action that is binding on the entire membership of the State of Michigan would be a very great mistake. Therefore, it will be the duty of the Speaker to evaluate as to whether or not a motion or resolution that is submitted is something that can be acted upon today.

I hope you will bear with me in the decisions I may make. You will recall that this is the first special session of the House of Delegates since 1939, and I might make some mistakes because I have very little precedent to follow. I will do my best to rule fairly; but may I repeat that, basically speaking, it will be up to the Speaker to decide whether or not a motion or resolution that is submitted is germane to the topic today.

There is in our Bylaws a definite statement that reso-

lutions will be referred to a reference committee; but motions will have to be evaluated. If action seems wise today, then action will be taken and there will be discussion. However, any resolution or any motion that I do not consider germane to what we are talking about today will be referred to the appropriate reference committee. When I say "appropriate" it simply means that the time for the appointment of reference committees for the meeting of the House of Delegates in September is not presently at hand. That appointment will be made very soon, but it has not been made as yet.

I would also like to inform you that your Speaker has been completely aware of the resolution that was passed in the House of Delegates in regard to a permanent Advisory Committee for the Study of Fees. Gentlemen, it has been a very real task to select that Committee but it will be appointed not later than May 15; there was no direction by the House of Delegates in the resolution as to who should constitute the Committee, how many should be on the Committee, how it should be handled, or when it should report, and it has been left up to the Speaker to make those decisions.

There is only one more thing to say, then, and it is this: It is not necessary for you to move for another session of this House of Delegates, since it is already set for September. That is automatic. However, if you should decide that you wish another special session of this House, then of course before we adjourn today it will be necessary to so move.

I would like to introduce to you Dr. L. Fernald Foster, Secretary of the Michigan State Medical Society, whose presentation will be, "How We Got Where We Are."

II. HOW WE GOT WHERE WE ARE

By Secretary L. Fernald Foster, M.D.

I have been assigned by The Council the subject, "How We Got Where We Are." Probably the first statement to be made in that connection is a statement as to where we are. I think that can be simply said, that we are still in the position of practicing medicine as a free enterprise, as we have all known it, and that that is where we are; but the title as assigned, "How We Got Where We Are," involves a consideration of certain factors that were operative in the last eighteen or twenty years to have preserved the status quo in which we find ourselves.

It was apparent, in the late '20s, that the costs of medical care were rising rapidly, and an appreciation of this was had probably as early as any by the State Medical Society. The rapidly increasing tempo of medical science had been adding considerably to the costs of medical care, and your State Medical Society through its Council and Executive Committee began early to conduct research studies in the costs of medical care.

These research studies involved, as some of you will remember, the sending of a delegation to Europe to study the plans on the continent and in England, and other studies, to the end that early in the consideration of this problem a device based on the insurance principle was developed—a device which many of you have probably forgotten, a device known as Mutual Health Service, a voluntary plan quite like the Michigan Medical Service, but a plan which was never put into operation because of certain economic conditions existing at the time.

However, in the early '30s there developed in this country a new social and political philosophy; and as I look about this room I see many men here who were active in the research studies and in the activities leading to the devices developed since.

Also, in this group I see many men to whom the early history of the present device under which we have operated is simply a matter of hearsay, and so this presentation has been ordered by The Council simply to refresh the memory of those who had an active part in

its development, and at the same time to bring to those to whom this is not firsthand information, the facts of what happened.

If you will remember, with the development of the new social and political philosophy in the early '30s, a philosophy based on paternalism and a philosophy that lent itself readily to the institution of a new type of medical practice that would fit into that new political and social philosophy.

It was perfectly evident at the time that unless something could be developed by the medical profession to preserve the private practice of medicine with all those attributes that we have pointed to so much, that of wholesome competition and unrestricted initiative, and a patient-physician relationship, and others—and so The Council set about developing some such procedure.

Obviously, they turned to the logical source of such a development, which was the insurance industry. The insurance industry flatly refused to have any part of such a development because of the lack of actuarial data and statistical information that was necessary in order to develop plans, contracts, fees, and so on.

So, it left your Council with but two alternatives. One was to endeavor by their own techniques to develop some sort of a device, or to succumb to the then actively developing programs in the Congress. The Council chose to lose, if they had to lose, by at least trying, rather than to lose by default; and so they set about developing what is now Michigan Medical Service.

They had only two commodities with which to work in the development of this device. One was the participation of nearly 90 per cent of the doctors of Michigan, and the second one was a will and a determination to solve this rapidly growing economic problem.

And so, by a most cumbersome and inefficient trial and error technique, but the only one at their disposal, they came forth with what is now Michigan Medical Service. Some of you will recall the fact that in the early stages, by the deficiencies in such a technique of trial and error, they found themselves many times in bad shape because it was purely guesswork.

As time went on, and as statistical information and actuarial data were compiled, it became sounder, and was on a sound actuarial basis. Incidentally, in this connection, let me say that it was the actuarial statistics developed by Michigan Medical Service that subsequently were utilized by the commercial companies in entering the field and making the contribution that they have since made. They have frankly made the statement that when they did enter the field, they entered it because they had then acquired actuarial data which were developed definitely by the Michigan State Medical Society in its program.

Now, we believe that Michigan Medical Service is certainly not perfect. We believe that for seventeen years it has served (as some of us said so many times) to save the medical profession from the institution of a governmental program of compulsion as compared to a voluntary program that is more democratic.

The most important thing that it has done, I believe, is to have served the public better. What it did for the medical profession, I would feel, might better be considered as a secondary result. But for seventeen years it has served a purpose.

Probably the device in its present form is not now adequate to serve the purpose of the problems that are arising due to our changing economic climate. That, I believe, is probably why today you have been called into session to determine what, if any, changes should be made in this device or whatever device is utilized to solve the problems of 1957.

There are, however, certain points that I should like to mention in this sketchy presentation. One is the fact that, first of all, Michigan Medical Service is not an insurance company. It was developed on the basis that if the medical profession were to indulge in this activity, it should stay within its prerogatives, and for that reason it was developed on the theory of a service plan.

As you know, only the medical profession is in a position to render service. A commercial insurance company can't give service; all they can give is dollars. All that the medical profession can give in any program is service. They haven't funds to give money. And therein lies the difference between a service plan and an insurance company.

The question has been raised many times that if the present device operated by the State Medical Society were to become an insurance company, then the medical profession might well ask itself if it was exercising its prerogative to be in the insurance business.

The medical profession from time to time has decried the fact that corporations practice medicine, and one might imagine that the insurance companies might well say: If they become an insurance company, what right have we as doctors of medicine to be operating an insurance company any more than a corporation has to be operative in the field of medical care?

Michigan Blue Shield is now constituted as the Michigan State Medical Society. Its corporation is the House of Delegates elected democratically by the component county societies. The corporate body elects the directors, 50 per cent of whom are practicing doctors of medicine. They determine the policies based on their knowledge of private practice as we understand it and have understood it.

The development of Michigan Medical Service over the last seventeen years has served the purpose of giving the people a better service at a price they could afford to pay, and at the same time preserving the private practice of medicine as a free enterprise.

Had The Council failed in 1939 when this was developed, those of you who have come into the practice of medicine since that time might never have known that the private practice of medicine was, as those of you who knew it who have been practicing for some time, something you probably would have been practicing under some scheme of compulsion that would have kept from you the knowledge of what private practice is as you know it today.

We believe that the development of Michigan Medical Service, as has been so often stated, has not only prevented the medical profession from having been invaded by governmental agencies, but there are other groups and other forces at work particularly now. Aside from that of governmental intervention, we have the pressure of commercial companies, we have the individual pressure groups, and of course we have the constant threat of governmental intervention.

It isn't government alone. It does not make too much difference, I believe, whether it is the government or private agencies or pressure groups. If any of them succeed in directing the practice of medicine, then we will have lost a heritage that we believe has been preserved for us and that has brought us to where we are at the present time.

I would like to close these remarks, which are just a sketchy review to most of you, about how we got where we are, which is simply a condition of status quo from our private practices.

The one element is the device we are here to discuss today, Michigan Medical Service. I think we should bear in mind also that the responsibility of the State Medical Society or Michigan Medical Service is to preserve, first of all, the over-all practice of medicine for everybody. I think we must realize that there is only one manner under which we all, as specialists, as staffs, as county medical societies and as rugged individuals can ally, and that is under the banner given you by your doctor of Medicine degree and the fundamental units of organized medicine.

I think your Council believes that its first responsibility is to preserve the over-all practice of medicine, and that then the problems arising from groups within the profession have to be handled as equitably as possible within the realm of being realistic in what we do, and at the same time keeping the plan actuarially sound.

The significant factor most often overlooked in this program is its acceptance by the people of Michigan and the country. Without doubt the representatives of Michigan Medical Service have done an excellent job in presenting the Blue Shield plan, but it is not because of the supersalesmanship of these representatives that the Blue Shield plans have grown so vigorously. It is because the people have wanted the service, and the protection this plan affords them.

This is a partnership proposition entered into between the patient and his doctor. Nothing must be done which will disturb or negate the relationship, because the success of the entire voluntary movement is based upon it. The interposition of any party between the patient and the doctor is an anathema to both, for socio-economic and scientific reasons.

Evidently to date the service afforded the patient by the doctor has been very acceptable to the patient, or he would not have continued his support of the program. We who have the responsibility for the administration of the program have the task of giving all the patients what they want and are willing to pay for within the philosophies of the plan.

We are not responsible for acceding to the wishes of pressure groups, nor of solving solely by this machinery all of the social and medical problems involved in the care and treatment of the healthy and the sick. To attempt to do this would be to accept a responsibility not intended by the Michigan Medical Service charter, nor possible within the scope of its financial assets.

THE SPEAKER: Thank you, Dr. Foster.

The next portion of the informational part of this meeting will be a discussion of various attempts that have been made to solve the problem. For this part of the presentation, Dr. Arch Walls, President of the Michigan State Medical Society, Dr. Donald W. Thorup of Benton Harbor, delegate from Berrien County Medical Society, and Dr. Max L. Lichter of Melvindale, a delegate from the Wayne County Medical Society, will be called upon at this time.

III. VARIOUS ATTEMPTS TO SOLVE THE PROBLEM

Panel Discussion by

Drs. Walls, Thorup and Lichter

PRESIDENT ARCH WALLS: The purpose of this panel this morning is to bring you merely factual information. These two members, Dr. Thorup and Dr. Lichter, are from a committee that was appointed by your State Society to study and review what other plans have been in existence and what they are doing throughout the United States. They have done a very exhaustive study, and we hope by their presentations this morning that they will be able to give you some factual information that you will be able to condense and form some opinions on as to what we are going to do in the future.

The plans outlined here were selected to represent various programs in the area of prepaid medical care. There are, of course, a great number of plans and approaches in existence, far too many to be detailed here. For the present purposes it was felt that prototypes of the various approaches would serve to indicate what has developed.

The presentation is based upon the following classification:

1. Plans controlled by medical societies:
 - (a) Blue Shield (1)
 - (b) Windsor (Ontario) Medical Service (2)
2. Plans not controlled by medical societies:
 - (a) Indemnity
 - (1) Commercial insurance (3)
 - (2) Deductible and co-insurance (4)

- (b) Group or closed panel
 - (1) Health Plan of the Kaiser Foundation (5)
 - (2) Health Insurance Plan of New York (HIP) (6)
 - (3) Community Health Association (CHA) (7)

Each plan is outlined under the following headings:

- 1. What the plan covers.
- 2. How physician functions under plan.
 - (a) Organizational structure.
 - (b) How physician is paid.
 - (c) How physician works under plan.

Rather than take further time, I will call on Dr. Donald Thorup to give you his presentation of the facts and information that he has.

* * *

D. W. THORUP, M.D. [Berrien]: There has been distributed to you gentlemen a glossary of terms which we felt might be beneficial to you in discussing or thinking about the various plans that are going to be presented. As Dr. Walls has said, we cannot begin to present anywhere near all of the prepaid plans that are in existence. Consequently, we have selected a few that we thought were examples of the various types, and we are presenting those plans in some detail.

This glossary of terms we will run through briefly. Most of these terms are probably familiar to you.

Participating Doctor.—A doctor of medicine who has signed an agreement with Michigan Blue Shield to accept as full payment for his services to Blue Shield members the fees as established in the Blue Shield Schedule of Benefits when the member's family income is within the limits of his Blue Shield contract. Currently there are two income limit contracts and two schedules of benefits—\$2,500 family income and \$5,000 family income ceilings.

Participating Hospital.—One that has a contract with Blue Cross to provide Blue Cross members with all available services covered in their Blue Cross contracts, and to look only to Blue Cross for payment of these services. Blue Cross in turn agrees to reimburse the hospital for all such services received by Blue Cross members, according to the payment formula established by the Blue Cross Board of Trustees. This is a legal agreement validated by both hospitals and Blue Cross.

Blue Cross Participating Agreement.—The document which contains signatures of the hospitals and Blue Cross, specifying the conditions under which a hospital is a "participating" hospital, and binding the hospital and Blue Cross to these conditions. These are signed by the doctor and the hospital agreeing to provide these hospital services.

Medicare is not particularly germane to our immediate problem, and is not going to be discussed in detail. It is a program through which dependents of U. S. servicemen and servicewomen are entitled to certain benefits. The program is administered by Blue Cross-Blue Shield acting as agents in this State.

Service Benefits.—This is a term that you hear a great deal about. Service benefits are hospital, medical and surgical services provided by the Blue Cross and Blue Shield certificates as needed. Payments for these services are made directly to the doctors and hospitals.

Insured Plans.—We refer here to programs of hospitalization, medical and surgical coverage offered by commercial insurance companies that are usually and in fact almost always on an indemnity basis.

Loss Ratio.—This is the ratio of claims paid to total income. At present the Blue Shield loss ratio is about 98 per cent.

Fee Schedules.—Also referred to as the Schedule of Benefits, the Fee Schedule provides payments for services on a level with what the medical profession regards as the average fee for the average case for persons within the prescribed income brackets. These schedules were developed, as you know, by committees of the Michigan

State Medical Society from information secured from you, the doctors of the State.

Non-Group Contracts.—These are certificates offered for individual participation in Blue Shield and Blue Cross.

Group Contract.—A certificate offered to groups of five or more people. The membership fees are paid collectively through one remitting agent.

Group Conversion.—The certificate offered to individuals when they leave the group through which they have been covered. The benefits are less broad for this type of service and the rates are somewhat higher.

Indemnity.—The term "indemnity," which we will use several times today, is specific cash payments paid for benefits. These are usually paid directly to the insured, unless he assigns them to the hospital or physician.

Catastrophic Illness Coverage.—A kind of modified "major medical" offered widely by commercial companies to provide coverage for catastrophic illnesses such as poliomyelitis, leukemia, diphtheria, and so on.

Major Medical.—These are programs that are provided for unusually long or complicated cases. They usually contain so-called deductible or co-insurance features; that is, after the basic coverage has been exhausted there is a benefit covered by the patient, and then subsequently benefits are paid by the member and the plan together. They share in payment on a predetermined percentage basis.

Several terms which you will hear later on when Dr. Lichter discusses them is the HIP, Health Insurance Plan of Greater New York; the CHA, Community Health Association, which is being spearheaded here in Detroit by certain union officials; the Kaiser, or Kaiser Foundation Health Plan; the Veterans Home Town Program, with which many of you are familiar, and the Windsor Medical Services plan, which I will discuss in some detail.

The terms "experience rating versus community rating" are extremely important terms in our discussion. "Experience rating" is a term used to describe the method by which many commercial companies arrive at rates for their remuneration. They determine the rate for each individual group on the basis of utilization of benefits and fees paid out for these benefits. The result is that so-called "cream" business, that is, large groups, particularly those with a high percentage of young employees or single male employees, the type who least need and use medical care, are likely to have a very low rate.

I might point out that these commercial carriers are not interested in providing services for groups and so-called associations. They are not particularly interested in the Farm Bureau, or the medical society, or lawyers' groups, or nursing groups, and so on—certain poor risk groups that they are not interested in carrying coverage on.

Small groups and those with a predominance of older employees who tend to use and need more medical care would have an extremely high rate. For them, the rate is often beyond their ability to pay.

It boils down to the fact that experience rating is good business for the insurance companies, but bad business from a community health protection standpoint and, in the long run, for the doctor. It would leave the patients, to whom he will be providing the most care, without a prepayment program. Under this experience rating concept the rate would be too high for them to afford, and actually inflict a penalty on poor health.

On the other hand, community rating, as practiced by Blue Shield, is a sound social concept. The Blue Shield rate is determined by the average utilization of all groups, large and small, and thus represents a reflection of the utilization of the community as a whole. In essence, the extremely good risk groups do carry some of the load of the very poor risk groups, but it levels out to the average for the entire community.

This provides protection at equal cost for all segments of the community on a fair and practical basis. It is not only good business for the doctor in the long run—it is the cornerstone of the basic Blue Shield philosophy of providing the most benefits at the lowest cost to the most number of people in the community.

Now, please turn to some of these specific plans. This material is in the booklet that was handed to you, or at least a good deal of it will be found there.

The first of the plans is the one with which you are most familiar, our own *Blue Shield Plan* selected as an example of a nonprofit, medical-society-controlled service benefit plan.

1. Our Plan covers:

- (a) In-hospital surgical care.
- (b) In-hospital medical care.
- (c) In-patient x-rays by schedule. \$15 on basic contracts.
- (d) Anesthesia by physician—payment by time.
- (e) Emergency first aid treatment and x-ray.
- (f) Limited office surgical care.
- (g) Maternity—delivery only—flat fee.
- (h) X-rays and EKG's as in-patients. Supplemental to basic by rider, unlimited as to number and in accord with fee schedule.
- (i) Hospitalization through Michigan Blue Cross.

2. Physicians' function with Plan:

- (a) Plan controlled by Michigan State Medical Society.
 - (1) Members of the House of Delegates of the Michigan State Medical Society are the members of the corporation.
 - (2) 33-member Board of Directors— $\frac{2}{3}$ must be M.D.'s. Six from Michigan Hospital Association, balance represents the public.
 - (3) All Board members are elected by members of the corporation, by the House of Delegates of the State Society.
- (b) Physicians are paid by Plan on a fee for service basis.
 - (1) Two schedules of benefits offered to the public—both of which were developed by the Michigan State Medical Society and adopted by the Plan Board of Directors. (Fees paid to general practitioners and specialists are the same.) They are considered as average fees for average cases.
 - (a) \$2,500 Family Income Limit Plan. (\$2,000 Single)
 - (b) \$5,000 Family Income Limit Plan. (\$3,750 Single)
 - (2) Participating physicians guarantee that fees for contract benefits paid by Plan are full payment for persons with incomes less than the income limit stated in their contracts.
 - (3) Plan uses advisory boards from county medical societies to recommend individual fees for specific cases which fall out of the category of routine. (Those are also passed upon by the Medical Advisory Board and the Board of Directors.)
- (c) The physician works as a private practitioner on a fee for service basis. He reserves the right to select the patients he wishes to care for. His participation with the Plan is optional. He may resign as an individual from participation with the plan without penalty.
- (d) Plan pays physician directly in all cases.

3. Plan's current cost to patient:*

- (a) Group \$2,500 Family Plan for medical and surgical care is \$3.25 per month.
- (b) Group \$5,000 Family Plan for medical and surgical care is \$4.50 per month.
- (c) Plan employs principle of community rating.
 - (1) All groups with same coverage get same rates regardless of utilization of individual group.
 - (2) All groups, regardless of type of employment, or nature of work or age grouping or race, are all charged the same rates for like contracts.
 - (3) Subscriber group contracts do not exclude pre-existing or chronic conditions.
 - (4) Deductibles and/or co-insurance are not written-in features of the Plan's contracts.
 - (5) Conversion privileges to individual status are available to group subscribers when employment is terminated.
 - (6) Provision is made to cover retired workers for same benefits and same rates as active group when formal retired group program exists.

Those are the developments of the Blue Shield Plan as it exists today. As pointed out, there is no penalty for nonparticipation. This Blue Shield Plan probably merits some comparison with some of the other Blue Shield plans. There are in existence Blue Shield plans controlled by medical societies which do not pay directly to nonparticipating physicians. In certain plans payment for nonparticipating physicians is made directly to the subscriber.

There are Blue Shield plans controlled by medical societies that are indemnity plans. They make payments on an indemnity basis solely. Their benefits, by the way, compare about equally with a good commercial insurance company. Any indemnity benefits from any source may be service benefits if a group of doctors elects to have them be service benefits. That is, if a county medical society in Indiana, for example, decides that the indemnity payment paid by Indiana Blue Shield is satisfactory, and if they are willing to accept it as a service benefit, then those indemnity benefits may in turn be the same as service benefits.

Similarly, a group of doctors can get together and decide to accept the benefits paid by a commercial insurance company; if they do, they then may serve as service benefits. That is not the customary procedure, of course.

There has been considerable discussion of more comprehensive service, and studies are being made of ways in which more comprehensive service can be provided by Blue Shield. It can be done within certain limits. It will cost more. The cost probably would be 30 to 35 per cent more than the cost for the \$5,000 income limit medical-surgical contract. By "more comprehensive benefits" I mean outpatient surgery, anesthesia, pathological services, therapeutic radiology, physical therapy, and a series of diagnostic procedures including x-rays, EKG's and metabolism tests.

The figure that I have given you is not an exact one. It is an approximation, and the actuaries are specific that they cannot be held exactly to that figure, but that is their approximation of the additional cost of those services.

As has been pointed out, Michigan Medical Service contract has unique features which set it apart from those held by commercial carriers' experience rating and community rating contracts.

*X-ray, EKG and 245-day Medical Rider available at additional subscription fee.

The second of the prototypes or services that I want to discuss is the Windsor Medical Service Plan. This Plan has been in existence since 1937, when it was established by the physicians of the Essex and Kent County Medical Societies.

1. Windsor Medical Service covers:
 - (a) Hospitalization through Ontario Blue Cross.
 - (b) In-hospital surgical care.
 - (c) Office surgical care.
 - (d) Maternity care (\$50 delivery plus pre- and post-care, at so much per visit).
 - (e) Medical anesthesia—payment by time.
 - (f) X-ray—diagnostic and therapeutic—no maximum.
 - (g) BMR, EKG, refractions, annual medical examination as outpatient.
 - (h) In-hospital medical—no limit on number of visits except as determined on each individual case by medical director.
 - (i) Consultation, with prior authorization by Plan.
 - (j) Shock treatments.
 - (k) Diagnostic hospital admissions.
 - (l) Home and office calls.
 - (m) Waiting periods for T&A's, hernias, gyn., O.B. and refractions.
2. Physicians' function with Plan:
 - (a) Controlled by Essex and Kent County Medical Societies.
 - (b) Board of Directors consists of ten members—seven M.D.'s and three lay people.
 - (c) Free choice of physician and fee for service based upon a schedule.
 - (d) Plan pays about 90 per cent of schedule, when pro ratio of income is adjusted to services.
 - (e) Plan fee schedule is about 89 per cent of Michigan Blue Shield \$5,000 Plan.
 - (f) Specialists are paid higher fees for consultation than G.P.'s.
 - (g) Non-participating physicians are not paid by Plan. Payments made to subscribers.
 - (h) Medical director adjudicates all disputes between subscribers and Plan and doctors and Plan—decision is usually final—can appeal to special committee who reports to the Board.
 - (i) Medical director reserves right to determine adequate amount of medical care, and Plan pays accordingly. Doctor can't charge extra to patient if Plan reduces allowances if patient is under income.
 - (j) The Plan's board and committees police itself. Reports are that it effectively reduces over-utilization and helps to stabilize rates to subscribers.
 - (k) Plan may cancel participation of M.D.
 - (l) Plan is full service for families under \$6,500 incomes—usually accepted for everyone.
 - (m) 35 to 40 per cent of Plan benefits are rendered outside hospital.
3. Plan's cost to patient:
 - (a) Group plan for a family—\$7.90 per month.
 - (b) Individual plan for a family—\$8.50 per month.
 - (c) Plan employs principle of community rating.
 - (d) Plan does not use deductibles or co-insurance.

Among the features of the Windsor Plan, as you will note, is the feature that the amount of allowable services is restricted by the Plan's medical director or committee. They refer to this practice as "taxing." Doctors report their services in much the same manner as through Michigan Medical Service. A schedule of fees

is administered and placed in the doctor's account for "allowable" services. The medical director has relatively great latitude in determining which services are allowable. For example, it is within his scope to reduce the number of medical attendance calls for which benefit will be allowed if, in his opinion, the doctor reports an inordinate number of such calls in relation to the disability and in relation to general standards of care in the area. As pointed out above, the medical director's decision in these instances is generally final. The items are then placed in the doctor's account as a charge against the total fund each month. At the end of each month the corporation subtracts its overhead ratio, generally in the vicinity of 10 per cent, from total charges against the plan from doctors' accounts. If doctors' accounts exceed the revenue, as is generally the case, a pro rata percentage is established, and this percentage is paid each doctor against his account in full and final settlement. We are given to understand that in practice the doctor receives about 90 per cent of his account. Nonparticipating doctors receive fees which are approximately 90 per cent of the schedule and are at liberty to charge the patient an additional amount.

Specialists are paid higher amounts for consultation than general practitioners. In Canada there is government certification of specialists, making them a very distinct class and making this differentiation more feasible than it would appear to be the situation in Michigan. This distinction is readily accepted.

The Windsor Plan is one of the most comprehensive programs of its type in existence today. It appears to enjoy a high degree of subscriber satisfaction. Control of the Plan seems to lie in the right of the corporation to determine which services will be allowed, and in their right to settle with doctors according to the sums available in the funds on a monthly basis.

The fee schedule of the Windsor Plan: A few examples are given. An office visit to the general practitioner is \$3 for the first visit and \$2 for the second. The office visit to a specialist in internal medicine is \$7. The fee for an appendectomy is \$100; the O.B. fee is \$50, and pre- and post-natal care is provided on an office visit basis of \$3 and \$2.

Finally, *commercial insurance contracts*, with which you are familiar and on which we need not spend much time:

1. Insurance covers:
 - (a) Hospital insurance, usually on basis of fixed amounts for room and extra services.
 - (b) In-hospital medical care per schedules.
 - (c) Office and hospital surgical care (including O.B., delivery only) per schedules.
 - (d) Emergency accident care (includes outpatient).
 - (e) Home and office calls—with and without deductibles.
 - (f) Outpatient diagnostic services on a deductible basis or maximum per year allowances. (No schedule on x-rays).
 - (g) Dread disease riders up to \$5,000 or \$10,000.
 - (h) Major medical coverage—usually inclusive of all charges for hospital, medical, drugs and appliances with deductibles and co-insurance. (No schedule of fees.)
2. Physician's function with carrier:
 - (a) Physicians are totally unassociated with insurance plans and have no voice in policy decisions covering payments for medical care.
 - (b) Insurance plans controlled by stockholders and lay corporation boards of directors.
 - (c) Physician is paid on fee for service from the insured member. Insured member looks to insurance company for claim. Payment, un-

- less assigned to doctor, is made to patient.
- (d) Each insurance company has a wide variety of fee schedules which it sells to insurance consumer. Usually, the one selected is determined by its price to the insured. Fee schedules range from \$100 schedules to \$150, \$200, \$225, \$250, \$300, \$350, \$400 so on.
 - (e) Insurance plans do not seek fee recommendations from the Michigan State Medical Society nor do they have county society fee adjudication boards to assist them in the determination of fees for unusual and complicated procedures.
 - (g) Physician reserves the right to choose his patients.
 - (h) Insurance plans generally will get together any kind of a plan desired by a group—but on an indemnity basis and scaled to fit a predetermined premium charge.

3. Cost of insurance plans to patients:

- (a) Cost varies with level of benefits selected by insured.
- (b) Cost of group contracts is determined by group utilization since insurance plans use the principle of risk selection and experience rating.
- (c) Cost of group contracts is also influenced by type of employment and age grouping.
- (d) Usually, conversion from a group status to an individual status upon termination of employment is not offered.
- (e) Seldom offers same coverage at same rates to retired workers as are available to active employees.
- (f) Many groups of employees are considered undesirable by insurance companies and are dropped or never written by them.

PRESIDENT WALLS: Thank you, Dr. Thorup.

Dr. Max Lichter, the next man on the panel, will talk to you in regard to some of the other plans that are in existence throughout the country, such as the Kaiser Plan, the HIP, and a few of the others that are in some of the smaller areas.

* * *

MAX L. LICHTER, M.D. (Wayne): This method of presentation which Dr. Thorup and I are following was designed to acquaint you with what is going on in various parts of the country, to provide you with a background which will prove valuable in your own considerations of the momentous problems facing the profession, at least in Michigan. The plans that I am going to discuss represent a departure from the type that have been given to you by Dr. Thorup.

The General Electric Comprehensive Medical Expense program is an insured program but, as you will note when we detail it, it represents a rather radical departure for an insured program, and also has in it certain features which could prove quite attractive to both the physicians and patients.

The Plan went into effect on October 1, 1955, despite considerable resistance on the part of union leaders in this industry, which represents about the third largest employer of people in the United States.

Despite the resistance of the leadership of these workers, 94 per cent of the employees signed up with the plan originally, and when the rolls were opened on October 1, 1956, a total of 99 per cent of the employees of General Electric accepted this Plan.

1. What Plan covers:

- (a) It is part of an insurance program providing life insurance, accidental death or dismemberment insurance for employees, weekly sickness and accident insurance for employees, comprehensive medical expense

for employees and dependents, and maternity benefits for female employees and dependent wives.

(b) There are two classes of expenses:

- (1) Type A covers hospital room and board, special hospital services required for medical or surgical care; operating room, drugs, dressings and blood transfusions; anesthetics surgical fees; diagnostic x-rays; infant care.

The Plan has a deductible feature which is put in for obvious reasons. Two obvious reasons come to mind. One is that it is a device to reduce the premium, and secondly it may be regarded as a device to prevent overutilization.

Under Type A, the first \$25 of expense is paid by the employee. The next \$225 is paid by the Plan. Then the co-insurance feature begins to operate, and the employee pays 15 per cent with the Plan paying 85 per cent.

- (2) Type B. Outpatient feature of Plan. Covers services of physicians, including specialists, other than for surgery; diagnostic laboratory work not covered under Type A; x-ray and radium treatment not covered under Type A. Oxygen and administration thereof not covered under Type A. Blood transfusions not covered under Type A. Services of most registered graduate nurses; drugs and medicines requiring prescription; rental of such equipment as iron lung; artificial limbs.

In any one calendar year the first \$50 is paid by the employee. That is per individual, not per family or per contract; it is the first \$50 for any one person. Above that, the Plan is strictly co-insurance, with the employee paying 25 per cent and the Plan paying 75 per cent.

- (3) Combined maximum benefits for Type A and Type B expenses for each covered individual—\$15,000 in total with maximum of \$7,500 in any one calendar year.
- (4) Benefits determined separately for each individual. Employee pays no more than first \$50 for any combination of both Type A and Type B expenses for any one covered person during any one calendar year.
- (5) Benefits for semi-private hospital accommodations are provided without dollar limit.
- (6) Maternity benefit (in lieu of ALL OTHER benefits):

Normal delivery—\$150. This is not necessarily a fee to the doctor; this is regarded as an indemnity payment to the patient in lieu of all other benefits.

Caesarean—\$225

Miscarriage—up to \$75

For severe complications of pregnancy or resulting from childbirth, Plan pays 75 per cent of amount exceeding \$150 (paid by employee) up to \$5,000 for any one pregnancy.

- (7) Psychiatric treatment out of hospital will be paid by Plan up to 50 per cent. If in hospital, benefits will be paid on basis of Type A and Type B.

2. How physician functions under Plan:

(a) Organizational structure

- (1) Through Metropolitan Life Insur-

ance Company. In effect until October 1, 1960.

- (2) Care is furnished through regular private practice channels. Patient has complete free choice.
- (b) How physician is paid
 - (1) Physician is paid his usual fee for service rendered, subject to deductible and co-insurance provisions of Type A, Type B, and maternity benefits coverage.
 - (2) Physician collects employee's portion of fee directly, and Plan's portion from the insurance carrier.
 - (3) There is no fee schedule. Benefits are based upon fees which are "reasonable, necessary and customary."
- (c) How he works under Plan

- (1) Physician's cooperation is essential to success of Plan. Must guard against taking unfair advantage of the insurance program. As Elmer Hess has said, "Insurance per se . . . does not create new wealth and . . . is no justification for increasing an otherwise reasonable fee for a professional service."
- (2) Physician renders his service upon usual basis of private practice. Necessary consultations are permitted. Surgical assistants are paid. Services can be rendered in the hospital, in the office, at home—wherever physician feels the patient will receive best care.

3. How much employee pays:

- (a) Is based upon whole Insurance Plan. He buys one package.
 - (1) For employee alone, 0.9 per cent of normal annual straight-time earnings.
 - (2) Comprehensive medical expense insurance and maternity benefits for dependents, additional 2 per cent of normal annual straight-time earnings.
 - (3) Example: Employee earns \$6,000 per year straight-time wages. Cost of Plan: Individual employee, \$54. Employee and dependents, \$174. This is for entire package.
 - (4) Balance of cost paid by General Electric.

(They pay, I am told, at least 50 per cent, and I have heard the figure of two-thirds.)

As I said earlier, this is an attractive plan, one which requires the cooperation of physicians. In Berkshire County, Massachusetts, where there are a fair number of General Electric employees, the County Medical Society has taken it upon themselves to establish a committee to police the operation of the Plan.

As you may know, just last month the Wisconsin Blue Shield Plan offered three contracts which in principle are similar to the program that General Electric is using. These three programs were based upon the experience obtained in Racine, Wisconsin. We can't tell you too much about it because there has not been an opportunity to investigate the program initiated by Wisconsin, but it certainly is one that deserves a lot of consideration.

The next plan that I think is of interest to you is the one that is sponsored by the *Kaiser Foundation*.

1. What Plan covers:

- (a) Diagnosis and treatment (surgical and medical) in hospital and home and office, by specialists, with no limits on number of visits, physical check-ups, pediatric care, eye examination for glasses.

- (b) Dependents pay half of x-ray and laboratory fee in most contracts.
- (c) Tonsillectomy \$15 extra for subscriber to \$35 extra for dependents.
- (d) 111 days' hospitalization for subscriber; 60 days for dependent, with additional 51 days at half private rate.
- (e) \$1 for each office visit (except in some contracts where for an additional premium this charge is prepaid). \$3.50 and \$5 house call charge, depending on time of day.

(These charges of \$3.50 and \$5 for a house call were put in mainly to provide additional revenue for the group that operates the medical aspects of this Plan. It provides no deterrent aspect, and when this was discussed with the Kaiser people their studies indicated that the \$1 had no particular effect on the utilization incidence.)

- (f) Obstetrics \$60 for subscribers; \$95 for dependent after ten months' membership.
- (g) Pre-existing conditions covered at half private rate in most groups. (This is just for the subscriber. By "subscriber" here I mean the man who is a member of a particular group.)
- (h) Drugs and appliances not furnished. (They can be purchased either at the clinics or hospitals that have been set up, and the cost is about 10 per cent less than one would pay in the drug store of his own choice.)
- (i) Free choice of physician within group. (If the patient is not satisfied with the physician to whom he was assigned, he can choose another physician within the group; this, however, has led to some embarrassing situations to both the physician and patient.)
- (j) Special provision for care outside service area, in which the Plan pays up to \$250 for expenses incurred. (In order to beat that cash outlay they have been known to send airplanes to pick up patients and bring them to their own hospital.)

2. How physician functions under Plan:

- (a) Organization Structure

(The organizational structure is rather complicated and difficult to understand. Apparently it has undergone some changes in the past few years.)

 - (1) Kaiser Foundation. Is a nonprofit organization, interested in many areas of philanthropy.
 - (2) Kaiser Health Plan (is regional). Three regions, one in the Northwest, the Portland-Vancouver area; one in the San Francisco Bay area, and the third in the Los Angeles area. Plan in these regions contracts with doctors and hospitals for services on behalf of its subscribers.
 - (3) Kaiser Foundation Hospitals own all hospitals and clinic buildings and rent space to doctors. (These were turned over to this new organization several years ago.)
 - (4) Permanente Medical Group in Bay area has 300 physicians (determined on basis of one physician per 1,000 patients), about 70 of whom are partners and balance are salaried.

(Apparently the Health Plan does not interfere with the group in the type of medical care rendered. They merely contract for service; but as nearly as we can determine, there is no intrusion of the Plan into the professional aspects of medicine. The third party rela-

relationship here is off to one side, and is purely a financial one.)

(b) How physician is paid

- (1) Group is paid a capitation fee by Plan. Extra charges to member as well as fees from private patients accrue to Permanente Group.
- (2) Physician is employed initially on a salary basis.

For example, it is easy to get internists. They will hire them for a lesser salary than they might hire surgeons. If they hire a thoracic surgeon, and if they are hard to come by, he might be engaged at an initial salary of \$1,500 a month. Their current salary for new internists is \$900 a month, and for surgeons \$1,000 a month.

After three years of satisfactory service, the physician may become a participant in the group. As a participant he is entitled to a certain portion of any profit or excess over operation that the entire group accumulates. After a two-year period he may purchase a partnership in the group. That runs somewhere around \$7,000 or \$8,000. The income of the partner depends upon his seniority and also upon the degree of responsibility he has in the group. All department heads, for example, are not paid the same salary, but as a partner they share alike and to a greater extent than participants in the profits.

(c) How physician works

- (1) Group divided into specialty services in each facility, each headed by a chief. There is intra- and inter-service consultation, and this is encouraged. Practically no general practitioners are employed.

As far as I could determine, in the Bay area they employ two general practitioners who are in the Department of Medicine. The rest of the operation is strictly by specialists who are either Board certified or Board eligible.

- (2) They work 5½ days a week or, as they put it, eleven halves in a week. They see patients in their own service by appointment. All administrative details are handled by ancillary assistants.
- (3) House calls, night and emergency service are rotated among the junior members.
- (4) Vacation periods, educational privileges, etc. depend upon the physician's status with the group.

3. How much it costs the patient:

- (a) This depends upon the class of coverage. The examples are based on family unit. Group—Same benefit for subscriber and dependents, \$14 per month. Group—Subscriber benefit and usual dependent, \$11.40 per month. Non-group (equivalent to usual dependent benefit and for subscriber and dependents), \$11.80 per month.
- (b) Groups pay \$2 registration fee
- (c) Non-group (family) pay \$4 registration fee and \$3.50 medical, review fee.
- (d) Approximately 600,000 members.

THE SPEAKER: May I ask the members of the House to write out your questions, and either send them to the front of the room or hold them up so they may be collected. We have asked the Vice Speaker, Dr. Lightbody, if he will take these questions and combine them so that when we come to the question and answer period this afternoon there won't be a lot of overlapping. As soon as you have written your questions, hold them up so that they may be collected, or bring them to the front of the room.

M. L. LICHTER, M.D.: The next plan of interest is the *Health Insurance Plan, HIP*.

1. What Plan covers:

- (a) Complete care including home, office and hospital by general practitioners and specialists.
- (b) Outpatient diagnostic and laboratory procedures.
- (c) Eye examinations, visiting nurse service, periodic health examinations, immunizations.
- (d) House calls at patient's request between 10 p.m. and 7 a.m. at extra charge of \$2. This is only extra.
- (e) Free choice of group and then of physician within group.

2. How physician functions under Plan:

- (a) Organizational structure
 - (1) A central "headquarters" which collects dues, disburses to physician groups; sets standards for initiation of groups and maintenance of standards of medical care; develops appropriate statistics; develops system of patient records and maintains their completion and collection; initiates subscriber as well as physician educational programs relative to the plan; conducts surveys concerning utilization and quality of medical care furnished members; administers a pension fund set up for physicians. (In this respect the central headquarters intrudes itself between the physician and patient.)
 - (2) Physicians form autonomous medical groups and approach plan for participation. Must conform both in composition and physical facilities to criteria laid down by plan. Groups are partnerships with additional physicians on a salary basis. Limited infrequently used specialties paid on a fee basis through a special fund contributed to by all groups. Groups must finance own building and equipment. Criteria, in addition to basic, further depend upon number of persons group contemplates caring for. All groups are responsible to central office through a 15-member medical control board, a policy-establishing mechanism. (The groups do not have any interrelationship other than as spokes of a wheel radiating toward the central headquarters, which is the hub.)
- (b) How physician is paid
 - (1) Group receives annual per capita fee of \$31.20 (at present) for each member who elects to use group. (This is not only for each member but also for each member of the family.)
 - (2) After administrative and operating expenses are paid, as well as salaries, collected funds are apportioned to group partners on basis of responsibility, training and seniority.
- (c) How physician works under Plan
 - (1) Almost all physicians work in Center part-time. (One exception in the group sponsored by the hospital in New York.) Most have own private office for private practice, but even here many will see HIP members. Only one group is composed entirely of full-time physicians, as it is associated with a hospital.
 - (2) As far as possible, each patient is

first seen by a general practitioner (who represents about 40 per cent of the 1,100 men in the plan), who serves as the personal physician and who acts as the referral agent and is responsible for follow-up of treatment as well as the patient's compliance with consultative referrals.

- (3) House calls rotated through partners of group with main responsibility falling on general practitioners.
- (4) Patients are seen by appointment with physician of choice. New patients are assigned on rotation. Provision for emergencies and drop-ins.
- (5) Non-members seen at Center with fees based upon a schedule and accruing to group. Part-time physicians (even partners) conduct private practice in own separate office.
- (6) Hospital care is given at hospital of which physician is a staff member or where he has privileges.
- (7) Group contracts with central office to furnish agreed medical services to members.

3. How much Plan costs patient:

- (a) Standard plan, designed for individuals with base salary of not more than \$6,000 or families with income of not more than \$7,500, has monthly cost of \$3.56 for individual; \$7.56 for couple, and \$10.68 for family. At least one-half must be paid by employers.
- (b) Subscriber earning more than in standard plan pays 20 per cent more.
- (c) Usual enrollment is group of 10 or more subscribers, though recently individual enrollment in apartments or housing projects has been undertaken.
- (d) All subscribers must carry own hospital insurance and it must be Associated Hospital Service of New York (Blue Cross).

The next plan is the *Community Health Association*, or *CHA*. Unfortunately, we have had to be quite vague in our presentation, because while we have heard much of what they are going to do, we have not been aware of any plan in which they outline precisely what is to be offered, and how.

All information relative to this plan should be regarded as hearsay, although much probably represents what will prove to be definitive.

1. What the Plan covers:

- (a) Apparently the coverage will be comprehensive in home, office and hospital with diagnostic and laboratory service. There is no information concerning exclusions. There is no information concerning extras. There is no information concerning status of dependent coverage.
- (b) Apparently plan is based upon combination of features of HIP and Kaiser Plan. At present it is said that CHA does not contemplate building own hospitals. (The present plan is that physician members of their organization will utilize the hospitals in which they now have membership or privileges.)
- (c) Apparently premium will include hospitalization. It may be that CHA will then negotiate for hospitalization directly with hospitals (though on what basis is presently not known) or will purchase hospitalization from Blue Cross.
- (d) It is said that, in beginning, CHA will start on a small-scale experimental basis.

One local union (for example) will be offered the plan. Within this group there will be further offered to the individual union member the choice of accepting CHA or continuing his present plan (or any modification thereof). It is said that this type of choice will always be a policy of the UAW-CIO. It is said that CHA eventually wishes to offer its plan to any member of the community.

2. How physicians function under Plan:

(a) Organizational structure

- (1) CHA will have a board of directors who will decide and control every aspect of the plan.
- (2) There will be a CHA medical director, responsible solely to the board. His responsibilities have not been announced.
- (3) Apparently there will be "built-in mechanisms to make possible the rendering of high quality medical care." (We put that in the form of a quote because those are words that Walter Reuther used.) It may be that this will be accomplished (policy-wise) by the establishment of a medical advisory committee (to the board) built around a university medical center. This committee, having no executive function, purportedly would be sensitive to trouble spots, advise on standards and policies, have no vested interest, and would eliminate local politics. It would screen all physicians having an integral role in the program.
- (4) Groups of physicians would be established to provide services of plan. There is no information concerning criteria for establishment of groups, financing of group facilities and equipment, or minimum number of members a group must care for. However, it has been suggested to the Board that it is dangerous to permit groups to have total autonomy. Hence, the group medical director, its executive officer, should have the title of associate medical director of the plan.

3. How the physician is paid:

- (a) No official pronouncement has been made. Best information at present is that all physicians will be on a salary, to be paid directly by the CHA. (We have also heard that a capitation system is contemplated, but we don't know which.)
- (b) No information is available from any source concerning care of nonmember (or private patients) and fees so derived.

4. How physician works:

- (a) No details are available. It is presumed that the 40-hour week will provide the basis for working hours. (We make that presumption because it is a presumption of the union regarding working hours.)
- (b) All of the standard reasons for attracting physicians to this type of group practice have been mentioned at one time or another.
- (c) Apparently the general practitioner will be "the cornerstone" of medical care, as advocated by HIP.
- (d) All physicians, presently having hospital staff appointments or privileges, will be expected to maintain them and utilize them

for the members of the plan. Hospitals, apparently, will be expected to see that staff membership or privileges are not jeopardized by the physician's participation in a group under the CHA plan.

- (e) No information is available concerning the actual functioning of physicians within the plan or the groups. It would seem, however, that "the quality of medical care" furnished by each physician will be subject to constant scrutiny as well as periodic evaluation. What this is intended to mean is not clear as yet.

5. How much it will cost patient:

- (a) There is no information, or even faint hint, on this subject. It is thought, however, that costs will be competitive with existing plans of Blue Cross-Blue Shield and commercial insurance.

You realize, of course, that there are other plans we could have discussed—The Ross-Hoos plan—what the physicians did in San Pedro, California, when faced with the impact of the Kaiser Plan—how the Palo Alto Clinic operates, and so on. We could have discussed the very fine approach taken by the San Joaquin Medical Society doctors in California, but I feel we have belabored you long enough, and at least we have (I hope) achieved our purpose of providing you with some background.

We could have discussed the differences and relationships of these various plans to each other, but I am sure with the material presented to you you can do this for yourselves.

PRESIDENT WALLS: I think a great deal of credit should be given to these men and their committee for the amount of factual information they have presented to you this morning. I hope the information they have given you will form a background on which you can talk more freely and ask more intelligently the questions and discuss more intelligently this afternoon the problems that we have and that are going to face us.

THE SPEAKER: I would only like to emphasize what Dr. Walls has said. Certainly, you gentlemen of the House would be completely blasé if you did not appreciate the tremendous amount of work which has gone into the preparation of this presentation at this special session of the House of Delegates.

We in the State of Michigan are very fortunate to have a man who has made a study of insurance for a great many years. I wonder if you also know that beside being Executive Vice President of the Michigan Medical Service, Mr. Ketchum is a former member of the Advisory Group to the Hoover Commission on Prepaid Medical Insurance. He is also one of the two lay members of the AMA Advisory Committee to the Council on Prepaid Medical Insurance.

IV. WHERE WE ARE NOW

Address by Jay C. Ketchum

Michigan Medical Service (Blue Shield) now provides coverage for medical-surgical expense, according to its various contracts, to almost one-half of the people of Michigan, some 3½ million. The benefits of coverage have been (with some exceptions) limited to hospitalized cases.

There has been voiced an increasing desire for extension of coverage into the diagnostic services without the requirement for hospitalization. Demands for extension of benefits to other than hospitalized cases are heard, not only from large numbers of subscribers but from many physicians as well.

Certainly, restricting payments to services rendered to in-hospital bed patients does affect medical practice, particularly as to minor surgical and diagnostic procedures. Coverage for long periods of hospitalized illness, includ-

ing convalescence, has been requested. In the main, but by no means exclusively, there have been requests for adjustment of our service income ceilings to more nearly reflect present economic conditions, voiced by the representatives of large organizations of our subscribers.

A spokesman for Labor, Dr. Morris Brand, last December in the *AFL-CIO News* stated Labor's aim in the field of prepayment for health care.

Dr. Brand stated that since Congress has not enacted legislation to set up a national insurance program—which most labor unions favor—unions have had to find other sources of health insurance coverage for their members, mainly Blue Cross-Blue Shield and commercial carriers.

However, Dr. Brand continued, since home and office care are rarely offered in these plans, some labor groups have established direct service medical centers where services are actually provided rather than cash indemnities to cover part of the costs. The latter type of plan has proven more popular with members because there are no barriers to the service, preventive services are usually included in the benefits, and there are no hidden bills cropping up after the services are rendered.

In general, Dr. Brand feels that "The extent to which commonly available insurance programs meet a family's health needs is not too impressive to Labor." He says that indemnity payments are "not a satisfactory method of paying for services and are a base upon which some physicians too frequently add substantial charges. Also, the emphasis on hospital and surgical coverage, as in the case of most plans without substantial outpatient benefits, is frequently a cause for unnecessary hospitalization. Also, as a result of inadequate concern for operating efficiency in hospitals and an unwillingness to enforce legitimate controls, there are unjustified premium increases."

According to Dr. Brand, these are Labor's goals for better health plans:

"1—Complete prepayment for medical care without co-insurance and deductible features and hidden added costs.

"2—Comprehensive benefits—only if the range of health services is complete will the individual's health needs be effectively and economically met.

"3—Rational organization of medical services—on the basis of group practice, and

"4—Control of the quality of medical services which must be built into medical care plans."

Mr. Walter Reuther, in his President's report to the UAW 16th Constitutional Convention, April, 1957, confirmed Dr. Brand's statement.

Efforts to develop a \$6,000 family income ceiling service contract have consumed so much time and, in relation to the fees proposed therefor, would require subscriber rates of such amount, that we are led to believe the results would not be acceptable to the interested subscriber groups.

The minimum benefits needed right now to satisfy the market seem to be approximately as follows:

Surgical services, in or out of the hospital.
Obstetrical services, in or out of the hospital.
Medical (non-surgical) services in the hospital.
Anesthesia services, in all surgical cases.
Diagnostic radiology, in or out of the hospital.
Therapeutic radiology, in or out of the hospital.
Physical therapy, in or out of the hospital.
EKG, BMR, EEG, EG, in or out of the hospital.
Pathological tissue examinations, in or out of the hospital.

These services to be limited only by the applicable scheduled fees.

Coverage for the services of consultants and surgical assistants is also desirable but presents difficult problems.

Extensions of benefits to those services performed outside of the hospital present unique problems in that certain elements of control of utilization inherent in the hospitalized case are not present outside. Conventional insurance methods toward control, such as deductibles

and co-insurance, might provide a degree of control and reduction of subscriber dues.

These methods, however, appear to be unacceptable in health care prepayment to the representatives speaking for many of our subscribers.

It is extremely difficult, if not impossible, to determine at what point a particular deductible amount or co-insurance percentage becomes not just inhibitive as to elective use, but, in effect, prohibitive as to utilization of needed services. These representatives insist that control of utilization must be assumed by the profession and the hospitals.

Deductible and co-insurance would undoubtedly receive much more acceptance if the maximums contemplated by our service schedules were certain of acceptance. It seems obvious that assurance of acceptance of our schedules of fees can be given only if there is some arrangement for some form of evaluation of charges by the profession.

An experiment by Blue Shield in Wisconsin provides for payment of physicians' usual and reasonable charges. Fee schedules as such have been completely abandoned (in this experiment). However, the Medical Society has assumed the full burden of evaluating charges, even to entering into court cases as co-defendant with the patient against what are considered unreasonable charges.

The scope and nature of benefits provided by Blue Shield are not the only shortcomings complained of by some of our subscribers. Mostly, these are regulations of Blue Shield activity caused by its relationship to, and the attitudes of, the medical profession.

There is, for example, the difficulty the subscriber experiences in determining the participating or non-participating status of a particular physician. It seems unfair to our subscriber when we promise service benefits and then seem to refuse to assist him in receiving the benefits.

It is just as difficult to demonstrate to many of our participating physicians that there is any justification for participation when the non-participating physician contributes nothing to the success of the Plan but enjoys its advantages. It is equally difficult to explain our attitudes toward other practitioners, such as dental surgeons, chiropractors and osteopaths, who legally render service covered by our contracts, who are willing to abide by our terms of participation, but who are not permitted that formal arrangement with Blue Shield.

The concept of providing prepayment for only the very lowest income classes has been rejected by most of the public. Many persons and groups of persons are convinced of the propriety and value of prepayment regardless of incomes, and are unable to understand why the profession is wary of dealing with all members of a group on a service basis.

The insurance companies in this field have underwritten coverages for large numbers of people. The coverage, quite similar to Blue Shield as to type and scope, is of course provided on the indemnification basis. The acceptability, to many groups, of the indemnity insurance is primarily based on price competition.

It is standard practice in the health insurance industry to promulgate rates for a particular group of assureds in relation to the experience of that group. The result of this practice is that, based on price competition, much of the preferred (or so-called "cream") business is underwritten by insurance companies.

Michigan Medical Service, being committed to provide the greatest good to the greatest number at a fair cost, utilizes what is commonly referred to as community rating; that is, for identical coverage identical rates are charged. This makes it possible for all, regardless of age, composition of group, race, occupation, and so on, or experience within a particular group, to enjoy protection at an average cost for all in the community in which Blue Shield operates.

The practice of experience rating, carried to its ultimate conclusion, can result in many of the people, the

preferred risks, being removed, for rating purposes, from the total community (the total average). Thus, the remainder, being not so preferred, must bear a higher proportion of the total cost of coverages.

This higher proportion of cost will, as it increases, become an effective prohibition to some, particularly the aged and lower income classes. When these can no longer afford to secure voluntary protection, they will look elsewhere, perhaps to government, for a method. That the traditional insurance approach, based on a profit motive, has failed to restrain government intervention, has been demonstrated in other lines of coverage.

While not the only example, the necessity for states to establish governmental controls, monopolistic funds, openly competing state-operated underwriters and restraining laws in workmen's compensation, is illustrative.

A comparatively new form of health care coverage, the so-called "major medical" contract, is receiving considerable acclaim in insurance circles as the answer to Blue Cross-Blue Shield competition. This form provides, subject to a deductible provision, from \$100 to \$500 but sometimes as low as \$25, and co-insurance above the deductible at 20 or 25 per cent but sometimes as low as 10 per cent, on almost all types of care of a patient, including hospitalization, physician, surgeon, drugs, appliances, convalescence, private duty nursing, and so on, at home, doctor's office, and so forth.

The only other limitation of any concern is related to time, during a period of one, two, three years or even longer, for a total aggregate cost, unallocated as to type of \$5,000, \$10,000 or even \$25,000. In one case we know of, there is no time limit and no dollar limit.

This, at first glance, seems to have a great deal of merit. However, students of the problems of the total population concerned with the final effects on medicine are aware of grave danger. Remember that the aggregate maximum amounts are not allocated, and no limit is placed on any one item. The individual charges by individual doctors, hospitals, nurses, and so on, are expected to be reasonable.

It is unlikely that there will be many flagrant abuses (although some have been reported) of the open-end provisions as to fees or charges. The real danger in "major medical" lies in the possibility or perhaps the probability (already well documented) of a gradual but nonetheless appreciable and consistent increase in charges for each service, simply because of the existence of the insurance.

Such increase, accumulated in the costs for each unit of millions of services, can ultimately effectively raise the cost of medical care to the point of creating the demand for intervention, the very thing which the public and medicine has hoped to avoid by reliance upon insurance and prepayment.

Demonstrating that some representatives of our largest groups of subscribers are aware of the dangers, there is, among many examples, the evaluation of "major medical expense insurance" by Jerome Pollack of the UAW-CIO, Department of Social Security. He says: "The insurance is without valid controls to prevent an unwarranted inflation in health service costs." His entire statement of conclusion is extremely informative and should be referred to.

The closed panel practice prepayment schemes, of which we have varying degrees of intelligence, consist of mechanisms whereby groups of professional persons are brought together under a single management to provide services for certain eligible people or groups of people. The arrangements between the management and the professional personnel may vary from salaried to per capita (or capitation); may be full- or part-time; equipment and facilities may be furnished by management or the professional individual. Control and status may be determined by professional personnel, by management and professional representation, or exclusively by management.

These groups may provide limited type and scope of benefit or up to almost all inclusive services. They may or may not require some payment at time of service in addition to prepayment dues. Many plans of this nature have been explained to you in considerable detail already this morning.

Much can be said of the advantages and disadvantages of these schemes, both from the professional as well as from the patients' point of view. There can be definite effects on the quality of medical care, on the patient-physician relationship, and on the freedom of physicians to practice good medicine.

Voicing my opinions in this matter would help you but slightly, if at all. You have an adequate knowledge of your own on which to base judgment, individually and collectively. I might add that the increasing rate of organization of this type of plan is, to my mind, an indication of dissatisfaction with the currently available plan.

There are plenty of examples of government provision of personal medical care. The most recent and dramatic example is Medicare, the program for provision of care for dependents of servicemen. This program, administered in Michigan by Blue Cross and Blue Shield, was adopted after long study by many interests, including your American Medical Association.

It can be said that the program, as finally instituted, was at best a compromise. Effective July 1, this year, the government, by grants-in-aid to states, will assume further obligations for medical care by virtue of the Welfare Act of 1956, for four more categories of its citizens. Under consideration in the present Congress is a proposal for the government to provide certain health care benefits to the beneficiaries of Old Age Survivors Insurance.

The people have been told that voluntary methods can provide the answers. The voluntary plans have shown great ability so far, and have led the people to expect more and better results. If the medical profession wants Blue Shield as its method in preference to other alternative attempts, and if Blue Shield is inadequate for current needs, then change or expansion must make it adequate.

Blue Shield can do the job, but it can do only what the profession wills it to do. It can be only what medicine and the public want it to be. Blue Shield in Michigan is a joint responsibility of medicine and the public, and will work as well as and only as well as that cooperation will permit.

Certainly the public has the responsibility to voluntary prepayment plans in that they themselves do not demand more than they are entitled to or need. Michigan Medical Service is medicine's responsibility in Michigan. Medicine obtained the franchise, organized, and operates Michigan Medical Service.

Only if the medical profession is convinced of the value of the service benefit approach under the aegis of medicine on a fee-for-service basis, with free choice of physician—only if the profession is convinced that this is the most acceptable device—only if the profession is convinced of the value of our voluntary, workable plan as an alternative to the various other schemes in existence and potential—only if the profession is willing to do what is necessary to make its plan work—should you continue to sponsor and concern yourselves with Michigan Medical Service.

If you are convinced of these things, then you must take an active part, acquire the necessary knowledge of the program, make decisions, and be willing to support them with a unified effort in co-operation with the public.

It is not sufficient that the profession express itself critically and with many voices. We will be unable to completely satisfy fifty-five county medical societies and eighteen or nineteen different specialty groups with oftentimes somewhat divergent, if not opposing, views. The profession must communicate with all segments, all

the many specialty groups, all the components, all the individual physicians.

It must consider all the different interests, and evaluate all the special problems. It must agree, compromise and reach decision. It must then direct and support united action in behalf of all the profession.

The only banner about which all of medicine can rally is that of its parent society—first, the AMA; second, the state societies; third, the county societies, and then the specialty groups.

Dr. Austin Smith, Editor of the *Journal of the AMA*, at Lansing on March 6 of this year made a strong plea for all doctors and all segments of medicine to resolve their differences and join hands in a united effort to prevent the catastrophe that has overwhelmed the public and the profession in many other countries.

Dr. Dwight Murray, in his Presidential Address to the AMA at Seattle last fall, warned: "No nation can merely reap the benefits of freedom; it must also sow the seeds of freedom. In medicine the situation is the same. If an apathetic profession takes its freedom for granted, it will be the beginning of the end. . . .

"The day has come, gentlemen, when we can no longer look upon medical economics and social changes merely as issues to be considered during our limited leisure hours. . . . We must now pay daily attention to these matters. . . . They must be a vital part of our life."

THE SPEAKER: Thank you, Mr. Ketchum. Without further ado, we shall recess the morning session. We shall reconvene immediately at 1:30 p.m. (*The meeting was recessed at 12:30 p.m.*)

SATURDAY AFTERNOON SESSION

April 27, 1957

The meeting reconvened at 1:45 p.m., K. H. Johnson, M.D., Speaker of the House of Delegates, presiding.

THE SPEAKER: Is the Credentials Committee ready to report?

A. B. GWINN, M.D.: Mr. Speaker, there are 108 delegates seated at this session, 50 per cent of whom are not from any one county. This constitutes a quorum.

THE SPEAKER: I therefore declare this second session of this special meeting in order.

I would like to announce that there is a total registration of 173, broken down as follows: 111 delegates and alternate delegates, twenty out of twenty-six members of The Council, and thirty-two county society officers and guests. All county medical societies are represented by delegates with the exception of six.

The next presentation will be by Dr. George W. Slagle, President-elect of the Michigan State Medical Society. His subject will be, "What Road Do You Want to Follow?"

V. WHAT ROAD DO YOU WANT TO FOLLOW?

By G. W. Slagle, M.D.

Time passes slowly, steadily and inexorably. The previous speakers have brought us along this trail of voluntary prepayment health insurance from the time it was a gleam in its daddy's eyes, through its fetal life, birth, childhood, adolescence and maturity. We have heard the story of Blue Shield, of private carriers, of closed panel plans, and of projected union plans. The facts of life, in so far as these problems are concerned, have been placed before you.

This leads us to a forking in the road. Which road do we want to follow? Do we want to adjust our thinking and planning of Blue Shield to present-day needs and make it even more successful than in the past, or do we want to disregard the warning clouds on the horizon and lose our plan—the doctor's plan—by default?

As has been stated many times today, Michigan Medical Service is the fiscal agent for the Michigan State Medical Society. You as delegates are its "stockholders" and elect its Board of Directors. Each of us through you, as our delegates, has a personal interest and responsibility in the future of our Blue Shield.

Now, if you will permit me to assume that the huge majority of the members of the Michigan State Medical Society (which I believe to be true) want Michigan Medical Service to be continued and to be broadened in scope and coverage, then I would like to present to you the thinking of many of your confreres and duly elected representatives.

Improved Lines of Communication.—It is readily agreed by those close to the problem that the lagging enthusiasm on the part of many physicians in Blue Shield involves a breakdown in communication. The rapid growth of the Blue Shield plans has created a problem in maintaining a constant flow of information to the participating doctor.

At this point I might ask the question, "Why the lack of 100 per cent active physician participation?" A combination of factors has probably been responsible. For example, general prosperity has eliminated the need for assurance of his fees, and in some physicians' thinking it has eliminated even the need for prepaid health insurance. The false notion that a third party is dictating his fees is probably another factor.

Through the years the plans have risen to the demands of the public and, without adequate explanation to the participating physician, have given the appearance of encroachment on his individuality and the free practice of medicine.

We must let it be known that Blue Shield earnestly and sincerely wants, needs and welcomes constructive criticism and suggestions from physicians, and that no suggestion nor criticism is too trivial or irrelevant to receive careful attention. Through these methods, in a spirit of good will and determination, we doctors will assure a continuation of the improvement and success of Blue Shield under the aegis of the profession.

It has been suggested that our professional relations force be further enlarged to comprise groups of participating physicians to combat lack of information among our colleagues in the informal atmosphere of our hospital lounges. In this regard each of us, after this particular meeting, can play a tremendously valuable part.

Through improved dissemination of information and an awakened interest of the profession in Blue Shield, we feel that all problems can be met and solved as each physician exercises his fair share of influence in the determination of policies that will best serve his patients.

Liberalization of Contracts.—There can be no argument that the ideal contract would give complete coverage of the individual "from womb to tomb" for a single subscription fee. Contrary to the belief of some individuals and groups, this contract carries a "cost tag." There is no such thing as "free" coverage; it costs, and someone has to meet that expense.

However, as has been outlined to you, plans for greater coverage for the subscriber are in the hopper and are being developed and will be made available at a cost that is actuarially sound and within the limits of ability of the subscriber to afford. It is imperative that this be done if we are to discharge our duty to our subscribers, the public.

Supervisory Control of Patients, Hospitals and Doctors.—For any plan to be successful, it has become apparent that faulty or improper utilization or extra cost to the carrier or subscriber must be kept at a minimum. We feel that this is not a one-way avenue—that it is not the infrequent doctor who is solely at fault or that it is his sole responsibility.

The subscriber must be shown that his requests for unnecessary care, or services not covered in his contract, will eventually result in increased premium rates and, if sufficiently great, might spell the demise of all voluntary health insurance.

In addition, the hospitals must assume their rightful duty in controlling excessive and prolonged medication, so-called extras and undue overstay.

Where and how we doctors fit into this program is the problem. Some years ago it was recommended by the Michigan State Medical Society that review committees be appointed by each individual hospital staff in an attempt to find a solution to the problem we faced at that time. Some are still functioning, but I daresay most have been inactive for some time.

Whether or not something along this line is the answer to the proper supervisory control of our present and contemplated Blue Shield coverage or that some other method should be devised, must rest with the individual hospital staff, county society and/or this House of Delegates.

Certainly, suggestions and recommendations that may come from resolutions and discussions in reference committee will be eagerly awaited, and we hope that this problem will be given serious consideration.

What Should the Profession's Action and Philosophy Be?—The following remarks that I will make are the result of the thinking of many individuals and committees who have studied this problem over many months, and are not solely original with me. They will apply not only to the matter of prepayment health service but also to the role that government and/or other pressure groups may seek to play. In the past, in 1939 and 1940, we were faced with a frontal attack and we knew, to a large degree, what we were up against; but now most of it is a flank attack, the endeavor to get a "foot in the doorway."

Replace Apathy with an Active, United Profession.—Today there is a greater need for a united, forceful and informed profession than ever before. The basic reason for this special meeting of the House of Delegates is to give you the information as to all the facets of prepayment of health care as of this moment. Through you primarily, and with the help of others, it is hoped that each individual member of the Michigan State Medical Society will be better informed so that after due deliberation considered decisions may be made. Once those decisions are made by the majority, then it is incumbent upon each of us to make it as nearly unanimous as humanly possible.

The road of apathy and disunity can lead only to disorder and possible disintegration, and we must sound a warning to all our colleagues who don't care or who are pulling in the opposite direction.

As I said before, we must become a fighting UNIT to keep the "doctor's plan" truly an ALL doctors' plan, to make it the best, and to give service to our subscribers so that the public will prefer the doctor's plan to panel practice, organizational practice, governmental practice or any other scheme involving third-party control.

Free Choice of Doctors.—The patients' right of free choice of physicians has been said many times before by many people, but to us it should never become a trite saying. We must continually prove to our patients that this right is an important one, one that under any of the methods stated before could easily be lost through directive of an intervening third party.

Oh yes, some plans maintain that when the individual joins their group they have freely chosen their physician, even though it is actually a group of salaried doctors. Ridiculous!

Free Conduct in Medical Treatment.—As President Dwight H. Murray of the American Medical Association has so succinctly stated, "Another freedom closely tied to freedom of choice is freedom in the conduct of medical treatment."

There should never be a third party telling you and me how we should treat and care for our patients. It is well known that closed panel plans claim to run more cheaply than Blue Shield plans. This is mainly because, by directives, the amount and type of laboratory examinations can be limited, the amount of time

spent with the patient can be designated and the treatment streamlined. It may be cheaper, but it's "short-change medicine."

The dangers of shifting responsibilities for medical care from the patient and doctor to a third party are obvious. The caliber of medical care cannot be as high as that which you and I give the patient. Initiative succumbs to dictation and the doctor becomes a "clock watcher."

Free choice of physician and free conduct of care engenders a mutual confidence and trust between the patient and the doctor that is so necessary for the well-being of the individual. Remove this bond, and the practice of medicine as you and I have known it—that priceless heritage passed on to us through the ages—is lost, and once lost can never be regained.

This philosophy of our profession is not new; it is not something esoteric; it is an every-day working concept that we all feel, share and believe in. It is the driving force that enabled us to become doctors of medicine, that carries us through our long hours of work, our problems and tribulations and, above all, that really endears us to our patients.

What Do the People Want?—Of great importance also is the fact that any general service by professional people which is to be sold must (1) be what the public wants and/or needs; (2) be within reach of the average man's income.

I propose that we find out what the public really wants, and that we get incontrovertible evidence to that effect. This will help us greatly when we talk to certain pressure groups who would have us believe that the real wants of the people are the same as the demands made by the leaders of pressure groups. I question whether these pressure groups actually speak the will of all of the people—or of a majority of the people—who subscribe to Blue Shield.

In other words, I propose that we go to the people through a survey or study that will give us part of the knowledge we need upon which to predicate any changes in our service, as well as the information necessary to meet any false claims that may be made.

I propose, further, that this study or survey determine the extent and willingness of people to pay for certain categories of medical and surgical service so that we can better determine upon the most attractive, as well as the most valuable, package to offer.

For example: Would the people prefer to have home and office calls covered rather than x-rays? Would our subscribers be more willing to pay for coverage of certain diagnostic procedures than minor surgery? and so forth.

I do not mean that services offered through Blue Shield should be limited to the most popular of the services, for we would all agree that such would be medically and scientifically unsound. Furthermore, Blue Shield must represent ALL the profession, and if it does not offer the broad variety of medical and surgical services it cannot do that.

I merely indicate that with knowledge of what the public really wants, with knowledge of what the people are most willing to pay for, and with these knowledges weighted by our own medical knowledge of what the public needs and what is actually possible within the limits of the public purse, we can arrive at the most attractive offer consistent with the public interest, consistent with our philosophy, and consistent with the reasonable cost of our services.

Action, United.—The actions we must take to preserve and implement these basic concepts must be arrived at by you and our confreres back home after due and careful deliberation. These must not be hasty decisions but a result of clear thinking and interpretation of the information given to you. The stand our united Society takes can and will have far-reaching effect.

Let us work for what is best for all the people and for the profession as a whole, and attempt to sublimate

any individual personal or selfish wish. Let us see the forest and not the trees!

THE SPEAKER: Thank you, Dr. Slagle.

Now I believe we are ready for the question and answer period. I believe it would be proper if we limit further questions to be submitted in the next five or six minutes. If you have questions, will you please hold them up; they will be collected and brought to the front.

We are going to handle this on a panel basis. The experts who have been giving you this information will please come forward.

I shall read the questions as they are projected so that they may be transmitted on the tape recorder.

VI. QUESTIONS AND ANSWERS

THE VICE SPEAKER: There have been quite a few duplications, and some of the questions were not too relative to the point for discussion today.

We shall go ahead with the first question, directed to Dr. Thorup:

"How is the doctor able to ascertain a member's family income? Often a subscriber has another source of income in the community, and yet he has a \$2,500 contract. Isn't this the main deterrent for nonparticipation in Blue Shield?"

D. W. THORUP, M.D.: That is one of the sources of irritation in the management of Blue Shield service. I don't know of any way to determine what the income of the individual is, except to ask him. The knowledge that we have of people of his similar employment status, and incomes that they are obtaining, probably is of value, but there is no way of knowing and there is no procedure at present that gives you the income of any subscriber.

THE VICE SPEAKER: This question is directed to Dr. Lichter:

"In discussing some of the plans regarding cost of certain services, mention was made of the part of the premium that was paid by the company. Does this mean the cost printed in the book is the cost to the subscriber, or to the subscriber and company?"

M. L. LICHTER, M.D.: Those costs are the total costs and represent the portion paid by the subscriber and the company. The amount paid by the company is not given in any of the figures. Usually it is one-half, and in some negotiated contracts the company pays the whole shot, but the cost given in the various material that we had is the total cost to a subscriber for the plan.

THE VICE SPEAKER: Is there anyone on the panel who would like to volunteer to answer this question?

"Everyone is talking about the grass roots subscriber. Has a survey ever been conducted to find out what the grass roots M.D. wants in our Blue Shield Plan?"

G. W. SLAGLE, M.D.: In the proposed survey, it primarily applies to the public. Also, in the discussion (and this has definitely been preliminary prior to approval or disapproval by the House), the matter of contacting the individual doctors has been thought of. Certainly various resolutions discussed before the Conference Committee in September will certainly have some of that material at hand. It certainly would be a good thing to consider in this survey.

The nearest thing to a survey like this having been done was in the previous action of the committees setting up the fees, and what each of us had a chance to vote on the last time in 1951, in which the recent committee for the projected \$6,000 policy had partly to do with. To my knowledge that was considered somewhat as a survey, but a specific written survey otherwise has not been done.

THE VICE SPEAKER: This question is directed to Dr. Lichter again:

"Can deductible and co-insurance be included in a policy purporting to be a service policy?"

M. L. LICHTER, M.D.: I think very definitely deductible features and co-insurance features can be incorporated in a policy that is a service policy. As long as the patient knows what his service is to be, and his natural responsibility in connection with that service is predictable, you have all the elements of a service policy.

THE VICE SPEAKER: If other members of the panel who have participated in the discussion would like to make any remarks relative to answering these questions by the delegates, I wish they would volunteer at this time.

The next question:

"During the period 1939 to the present, Blue Cross costs have steadily increased with regular and corresponding increases. During the same period Blue Shield fees have been raised very little, and certainly not corresponding to a realistic cost for services rendered. Why should Blue Shield not use the same procedure for realistic changes in fees and premiums kept up to date?"

MR. KETCHUM: When you put apples and cherries together you get fruit salad. We are talking about two entirely different things when we talk about Blue Cross rates and Blue Shield rates, because the commodities and the services we are talking about are entirely different things.

The point from which we take off, regardless of what date you want to use—1939 or 1950 or otherwise—hospital costs were on an entirely different basis from the cost of almost any other service or commodity which the people of this country availed themselves of. All of you know, if you have been in the practice of medicine for any length of time, that hospital labor compared to all other forms of labor was terrifically underpaid. Hospitals' operating expenses are made up of labor and supplies. Supplies to hospitals have increased in cost about the same as supplies in any other operation, industry or even personal and family.

Labor costs in hospitals have increased much more than they have in any other service or operation because of the very nature of the labor utilized by hospitals in the past as compared to the nature of labor utilized by hospitals now.

The difference in the work week is also a factor. Hospitals used to use their employees 60 and 72 hours a week. They now use them 44 hours, in some places 48 hours. Many hospitals are paying union scales for their employees; at any rate, the cost of labor has almost quadrupled in many categories.

You have recently seen the announcement of the increased cost for nursing care. There was no comparison of the scales paid hospital labor in the past to what is being paid now. Unfortunately we have not seen the end of that increase in cost in the operation of hospitals, at least in the labor costs of hospitals, because hospitals have not yet caught up with the going scales for labor in almost every other type of endeavor.

Comparing hospital costs to doctors' fees is just not possible because of this difference. Also, there are many other factors that have to be considered when you consider the doctor's income. Individual unit fees are not the yardstick by which doctors' incomes are measured. There is only one yardstick by which doctors' incomes will be and can be adequately measured, and that is total incomes for a period of work during a week, a month or a year, which is comparable to another period at some other point.

Doctors' incomes, according to the only material available, have increased more in the total than have the incomes of any other profession or trade increased in

the past several years, in spite of the fact that individual unit fees for individual categories of services may not have increased.

As I said, there are many factors contributing to this. The facility and convenience with which a doctor meets and deals with his patients is a factor. These patients come to the hospital many more times now than they did in the past. You meet them and treat them there. This is one of the problems that insurance has caused as a problem in the utilization of hospital facilities, but it is a benefit to the profession in that you deal with your patients in the hospital. They come to your offices more easily and more conveniently today by car and highway than they did in the past, when you went to them with a horse and buggy or maybe a Model T Ford.

All of these questions have to do with the question of comparable increases in incomes and costs. The doctors' incomes, as I said a few moments ago, have increased beyond the increases enjoyed by any other profession, trade or industry, and this can be proven and is proven in the daily press almost every day these days.

Peculiarly, in Michigan, having the third highest percentage of enrollment in Blue Shield and in insurance in the United States, doctors' incomes are above those in any other state in the United States, according to the recent survey of *Medical Economics*.

THE VICE SPEAKER: This is another hot potato, directed to Dr. Foster:

"What can be done to prevent overutilization of hospital facilities by patients and physicians?"

SECRETARY FOSTER: Apparently this question is at the root of all of our trouble, or most of it. You have heard today, in all of the plans that were suggested, that running through all of them were devices whereby there were controls exercised, and it was repeated over and over again that these controls had to be within the profession.

The question is often asked, "Why doesn't Blue Shield exercise controls?" I don't believe any of us would welcome the exercising of controls by a fiscal agent, Blue Shield. I believe we as a profession should stay within our prerogative and do our own controlling.

I think that up to this time the only schemes that have been suggested have been that they be done by hospital staffs in the various communities, whereby through smaller groups they can have these review committees and can control, to a certain extent, the utilization, because some of it is so obviously faulty that it would not be a difficult job.

As long as no attempt is made—and as Dr. Slagle said today that most of these committees instituted a few years ago are probably inactive at the present time—I think it boils down to the fact that overutilization is a problem of the medical profession, and I don't believe we can delegate it to the fiscal agent, Blue Shield, or that we can delegate it to anyone outside of our own group. I don't believe our members would accept any type of control that came from without the profession. Probably definitely that is the way it should be.

THE VICE SPEAKER: The next question:

"The United States Congress will soon pass legislation to give OSAI old age recipients hospital and medical service at federal government expense under Health, Education and Welfare (HEW). Do we have plans to sell the government our voluntary health insurance contracts?"

MR. KETCHUM: The program which the Congress is contemplating in connection with the recipients of OASI for hospital care, (and incidentally at this point it does not include medical care) is an entirely different problem. That is a provision for care of em-

employed people or independent citizens. This is a special category of citizens.

The agent is receiving pensions or payments through OASI, which I contemplated when I stated the failure of voluntary insurance to answer all of the problems in the provision of health care.

The commercial insurance companies are certainly not interested in this poor category of risk for commercial insurance. Blue Cross and Blue Shield would love to take on this job if we were not convinced through our actuaries' computations that taking on this job would probably break us before we got very far into it. It is a job that could well have been taken care of on a voluntary basis.

Had we had the plans operating and without the interference of experience rated competition, perhaps we could have taken care of it. We were not in time with it, and in my estimation this bill will pass the Congress, and the recipients under OASI will receive a certain degree of hospital care at government expense.

Very much the same thing is happening in Canada right now. Just this past week the Ontario government decided to provide hospitalization at government expense for all of its citizens up to a certain level, and there is a certain level of hospital care. The statement was made at the time, and the releases last week stated (and unfortunately I have only seen the press releases and I don't have the intelligence of the whole situation) that commercial insurance in the hospitalization field would be put out of business—that there would be nothing for commercial insurance to do.

They hoped that Blue Cross, in providing the coverage over and above basic coverage, would be able to provide something extra for the use of semi-private beds and private beds certainly not for ward beds. So, in Ontario, hospitalization as coverage as we have known it is out of business.

This OASI thing is just another indication of what can happen when certain categories of people are unable to buy voluntary protection.

I also mentioned this morning four other categories of government wards which are going to receive medical care as well as hospital care at the expense of government, that is, the aged, the blind, disabled children, and one other that I can't think of (a minor category). This is going to be a continuing thing until voluntary means do provide for all of these categories which are at least self-sustaining.

THE VICE SPEAKER:

"What control does the medical profession have over Blue Cross?"

SECRETARY FOSTER: I think the realistic answer would be "None." There are forty-one on the Blue Cross Board of Directors; twenty-one are hospital administrators or members of boards of trustees. There are six doctors of medicine on that Board of forty-one, and the remaining members are public representatives. The direction of Blue Cross, I believe we can definitely say, emanates from the hospitals.

THE VICE SPEAKER:

"It is generally stated that the average family income is above \$4,000. Please state what percentage of Blue Cross-Blue Shield subscribers have \$2,500 contracts and what percentage have \$5,000 contracts. What is the procedure used to determine and maintain the subscriber's current eligibility?"

MR. KETCHUM: Just so I won't be proven a liar, I am going to ask one of my staff to give me fairly current percentage figures on this \$2,500 as opposed to \$5,000.

Fifty-six per cent of our contract holders hold the \$5,000 income contract. Obviously, 44 per cent hold the \$2,500 contract. Seventy-four per cent of our contracts are the medical-surgical contracts. Obviously, then, 26 per cent are the surgical-only contracts.

The family incomes are just about \$4,000, as this question stated. I think our last figure was \$3,860 or so average family income in the State of Michigan."

"What is the procedure used to determine and maintain the subscriber's current eligibility?" I am not sure I understand the question. If I make a wrong assumption here, whoever asked this question I would hope will clarify it.

The procedure we use in Michigan Medical Service and Michigan Hospital Service is the maintenance of a complete file of all subscribers by contract number. When a request is made of us for verification of the subscriber's eligibility, this file is referred to and his current paid-to-date is determined; her status as to maternity benefits is determined if there has been a waiting period on the contract.

It has not been common practice for Michigan Medical Service to verify coverage for doctors. We do it in some cases. It has never been a great problem because the request is made by the hospital. I think there are thirty-three of the major hospitals that have teletype equipment wired into this office. Inquiries are made at a certain period by the hospital, each hospital having an assigned period, and the information goes back to the hospital that day as to whether or not that patient seeking hospital entrance is eligible. The doctors rely on that to determine whether or not the subscriber is in a paid-up condition.

THE VICE SPEAKER:

"Are osteopaths now participating physicians?"

I shall ask Dr. Walls to answer that. It could be answered categorically "yes" or "no," but I don't think he will do that.

PRESIDENT WALLS: What do you mean by "yes" or "no"?

Osteopaths are nonparticipating as far as representation is concerned. They are being paid, however, by Blue Shield, and their patients are being taken care of by the Blue Cross.

There has been much discussion in the past, and we hope to have some further information by September in regard to what can be done with the osteopaths in regard to participation in Blue Shield.

THE VICE SPEAKER:

"When was the last increase in premiums for Blue Shield?"

MR. KETCHUM: There has been no increase in the premium for the \$5,000 surgical-medical contract or surgical contract, as far as that is concerned, since its inception in about 1949-1950. There was a 10 cent increase in the subscriber rate per person in the \$2,500 contract back in 1950. There have been increases in the individual fees in the schedule under the \$2,500 contract since its inception, which have totaled something like 23 or 24 per cent. There have been individual adjustments in the doctors' fees under the \$5,000 contract from time to time, as individually considered by the Medical Advisory Committee.

There has been a reduction in the operating overhead of Michigan Medical Service of several per cent in the last few years, which has made it possible for us to pick up increased utilization and the adjustments upward in the specific individual fees without an increase in rates.

We are at the point right now where we are having to consider the possibility of a rate increase for all Blue Shield contracts.

THE VICE SPEAKER:

"Has Blue Cross or Blue Shield attempted to conduct a grass roots survey of policyholders concerning their views on the services rendered and the costs of these services, particularly to find out if the public wants present policies liberalized?"

G. W. SLAGLE, M.D.: The answer is yes. There is one under way now by Blue Shield, attempting to do this. The proponents of the proposal I submitted knew this, and we hope to be able (if the proposal I suggested is accepted) to utilize their findings along with independent findings of our own in this problem. I cannot answer it as far as Blue Cross is concerned. It is a joint survey.

THE VICE SPEAKER: This is another hot potato:

"Did the announcement of the development of CHA have any influence on the decision of The Council to call this special meeting?"

G. W. SLAGLE, M.D.: Basically, no. Committees were functioning. First, eighteen months ago, at the request of the Executive Director of Blue Shield, a committee was appointed by The Council to take a "big look" at Michigan Medical Service and what could be done in the future—how it was to be done—and it was a result of the findings of that committee, originally chairmanned by Dr. Foster, and in the past year chairmanned by myself, that led basically to this meeting. Also, results of two other committees being brought to light were factors that helped us.

The CHA proposition has been evolved while these committees were studying it. I think I am correct that Mr. Ketchum and others had their ears to the ground and, knowing that we had to do something to improve our service, drew the care and the over-all coverage. So, this special meeting of the House of Delegates is a result of the action of those committees, and only incidentally was the idea of CHA used as a little bit of a whip to stimulate us a little more.

THE VICE SPEAKER:

"Many members of the Michigan State Medical Society believe that participating M.D.'s should accept Michigan Medical Service fees and not be allowed to make any additional charges. Why not eliminate all additional charges as a good public relations gesture?"

Dr. Foster, would you take a whiff of that?

SECRETARY FOSTER: The Vice Speaker said, "You have to pick on somebody," and apparently I had the handiest seat.

The answer I heard echoed all along the table was "Yes," but I think, after all, eliminating all additional charges would certainly be good public relations, but I don't believe it is realistic.

THE VICE SPEAKER:

"The twelve-hour limitation on treatment of injuries seems to be a source of irritation to our members. Can this limitation be eliminated?" Jay, that is for you.

MR. KETCHUM: If this is Michigan Medical Service that you are talking about, it is twenty-four hours and not twelve hours. This provision in our contract for outpatient care of injuries was intended only as a first aid measure. It was not intended to be full treatment by any means. It was simply to get the people off the street and to have their immediate needs taken care of. The contract is rated for just that type of coverage.

You will also remember that there is no limit for the treatment of traumatic injuries in connection with an accident as far as fees are concerned, other than the \$15 provision for first aid.

THE VICE SPEAKER: We have several questions here that have been directed to Dr. Lichter, so I will ask him to come up and read them and give the answers.

M. L. LICHTER, M.D.:

"What specific methods have been tried or are proposed to control doctors' fees to a reasonable level, and what ditto to control overutilization of services of a doctor?"

The methods that have been tried are, first, the use

of substantial deductible and co-insurance features, emphasize the word "substantial." The same is true of the control of overutilization of services.

Another method that has been tried (notably in Windsor) is the use of rather stringent policing (with apologies to Dr. Foster's esthetic sense) methods, where by a physician can be removed from participation or the contract of a subscriber cancelled out.

Another method used in Windsor, as far as overutilization or the control of doctors' fees is concerned, has been to substantially reduce the fee that the physician submits, and if there is overutilization the physician's fee may be reduced because it might be felt that he encouraged this overutilization.

The next question deals with the same thing:

"Is there a built-in method of writing a policy to reduce the incidence of improper practices which tend to be fostered by prepayment plans?"

There is no conceivable way of building into a plan anything that will prevent sin. The only way you can build anything into any plan is for the physicians and the patients to realize the value of the device and to cooperate with it, recognizing that anything they do toward abusing it will result in the thing failing.

"Should hospitals be licensed by the state government?"

I think we can all agree that the answer to that is a flat "yes."

"Can fee-for-service practice compete with closed panel practice in cost?"

If we think of this strictly from a cost standpoint, without any regard for the advantages of a fee-for-service type of contract, I am afraid the answer would be that we cannot compete on solely a cost basis, because closed panel practices are predicated on building in "efficiency" in the furnishing of medical care to patients. However, as you well know, this is not always good for people. The difference in cost, however, would not be so great as to make that difference a point of substantial objection.

"Is in-hospital medical and surgical care provided for by HIP?"

Yes. That is the medical service aspect of their contract; but, if you will recall, the patient must provide his own hospital insurance, and then through a specific carrier, the Blue Cross in New York City.

"Does the Windsor Plan at \$7.90 per month cover hospitalization?"

No. The subscriber must provide his own hospitalization. The Windsor Plan merely provides medical service. It is sponsored by the Essex County Medical Society and has nothing to do with hospital cost.

"In the General Electric Plan, is any life insurance included?"

It is, only in the employee's portion of the package. There is no life insurance for dependents.

This next question, I think, is rather an important one:

"Could the relative value schedule of the California Medical Association be used in the Michigan Medical Service schedule of fees?"

As you know, the relative value schedule of the California Medical Association was developed to determine the relationship between various surgical, medical, pathologic and radiologic procedures that are performed. By determining this relative relationship, which is done on a unit basis, and then using a factor, a dollar value can be placed upon each service.

For example, an appendectomy is rated at 35 units. The unitage is on the basis of 100 being the highest. A hysterectomy is rated at 60 units. If the average fee for an appendectomy, let's say, is \$175, dividing that by 35 gives you a unit value of \$5. Now you are in business, and you can start to compute the dollar value of these other procedures, which would make a hysterectomy, on that basis, \$300.

If, on the other hand, the unit value is \$4, then the appendectomy is \$140 and the hysterectomy is \$240.

One of the big problems (and perhaps dissatisfactions with many physicians) is their sense that fee schedules may not be adequate and may not reflect their own personal schedules. By developing a relative value scale, first of all, the relationship of their own fees among various procedures can be established.

The other thing that this type of thing would accomplish is taking into account the difference in average fees in various parts of a given area. It might be very well if we considered the development of our own relative fee schedule.

One of the important points of having this type of fee schedule, according to the California Medical Association's committee's report, is that it then provides you with a yardstick for measuring the adequacy of the fee schedule developed by a commercial carrier. Both physicians and consumers are then able to determine whether they are purchasing or getting the thing that they have bought.

This relative fee schedule is used in one very attractive county medical society plan in California, wherein by its use the schedule has been raised to a level which is quite satisfactory to 92 per cent of the membership of that particular county medical society. I personally feel it would be a very valuable thing if we in Michigan developed a relative value schedule of this nature.

THE VICE SPEAKER: We have had a number of questions about surveys of patients and surveys of doctors, and so on, relative to types of policies the patients want, and patients the doctors would like to have.

I read this question once before; but because one of our members would like to say something about this, I am going to read it again:

"Everyone is talking about the grass roots subscriber. Has a survey ever been conducted to find out what the grass roots M.D. wants in our Blue Shield plan?"

Dr. Bob Novy, would you say a few words about that?

R. L. NOVY, M.D. [Wayne]: I can't resist the temptation of going off my subject just a little bit in reference to the last question of relative fee schedules.

To get the thing straight, if a relative fee schedule is not totally relative across the board, there is a relative fee schedule for internal medicine; there is a relative fee schedule for allergy; there is a relative fee schedule for surgery, and you cannot compare them across the board. They each have a different factor. You can when you use that factor and convert it into cash, yes; but as the relative fee schedule stands, you cannot use an office call to determine how much an appendectomy is going to pay.

In regard to this question: *"Has a survey ever been conducted to find out what the grass roots M.D. wants in our Blue Shield Plan?"* There has been. Unfortunately, there was a certain amount of opposition at the time this was put into effect, and also a very decided lag in the time in which it was published. It has been published. The Council on Medical Service undertook the survey, and it was made throughout the United States on a basis that was significant statistically, directed entirely to the doctor as to the type of program he would be interested in, whether it would be service or whether it would be indemnity or whether it would be none, and also a survey at the same time that if he did have a service plan, whether it would be unlimited service or limited to what categories, \$2,000, \$4,000, \$6,000, \$7,000 or what.

That survey was returned. To answer the pertinent question, about two-thirds of the doctors in the country were in favor of service plans. That was a good size proportion. Others had approval with qualifications.

Another outstanding thing in the survey showed that the income limit was probably around \$7,000 or thereabouts as the doctors throughout the country made their replies to that question.

I think that covers particularly the thing that is pertinent—in the first place, whether or not service plans are acceptable throughout the country on the part of the doctor. The answer, as indicated by that survey, is yes.

As indicated by the income limit that they considered, it was variable, of course, but even more than we have considered here in Michigan.

THE VICE SPEAKER: There are several questions that have been directed to Dr. Thorup, and I will ask him to come up, read the questions, and answer them.

D. W. THORUP, M.D.:

"What major Blue Shield plan pays the professional fee of the patient when the physician is nonparticipating?"

I think a little additional research is necessary to get the answers. I don't know that I have all of them yet. There are gradations of that.

The answer to the question is that Northeastern New York Medical Service, Incorporated; Colorado Medical Service; District of Columbia Medical Service; United Medical Service of New York; Wisconsin Associated Service; Maine Medical Service; Maryland Medical Service; Surgical Medical Care, Kansas City, pay only 90 per cent. Some of these pay less than the total amount. Those are the plans which pay directly to the patient when the physician is nonparticipating.

Several other plans—Montana, Arkansas, Utah, Minnesota, Massachusetts and North Dakota—pay the nonparticipating doctors on a reduced amount. Massachusetts pays 50 per cent, but they pay it to the doctor—but only 50 per cent. Montana pays 85 per cent, and the others pay proportions in between.

"What per cent of population does the Windsor Medical Service cover?"

Approximately 80 per cent of the eligible people in the area, as nearly as can be determined.

THE VICE SPEAKER: Some of the questions that we have had may have what would appear to be personal problems, but I believe this one has more than that to it:

"When the Michigan State Medical Society frowns upon professional relations of its members with osteopaths, how can Blue Shield condone payment for x-ray examination to osteopathic hospitals ordered by osteopaths, and refuse to allow a member of the Michigan State Medical Society, in good standing, to be paid for diagnostic x-ray work when that work constitutes his only income?"

PRESIDENT WALLS: I could probably spend the afternoon talking about osteopaths, their relationship with doctors, and what their relationship has been and what it might be in the future.

I was on the national AMA committee, the Review Board, to bring about an answer to what could be done with the raising of the level of the osteopaths. At that time we reviewed a great many of their schools, and found that the first two years of their educational program was on a par with the medical profession schools. They were lacking in the education of the clinical years.

That is the problem which the AMA and each and every individual state is trying to solve today.

When you realize that we have 1,600 osteopaths in the State of Michigan, and that they are taking care of over 20 per cent of the people—and we as M.D.'s are interested and have a responsibility to give the public

of Michigan the best medical care that is possible—I do think and I charge each and every one of you to say that we do have an interest in raising the level of the osteopath, in his education and in the work he is doing, and hoping to have some control over it.

Osteopaths are just as much interested in raising their standards as we are in having them raise their standards. I trust in the future that there will be some sort of relationship that will be satisfactory to them and to us, arrived at for the benefit of patients.

THE VICE SPEAKER: Mr. Ketchum has some further information relative to a question that he answered in part previously.

MR. KETCHUM: Someone put in a supplemental question:

"Is Mr. Ketchum referring to gross income of M.D.'s or net income? I do not feel the question was adequately answered."

Fortunately, we have a library of intelligence up on the next floor, which takes up, I would say, a quarter of the space contained in this audience, but it is never possible to bring the particular piece of information with you because you don't know what it is going to be that you may need to answer a specific question; but in this case we were able quickly to find the source material to which I was referring.

These figures are a national average and are not for the specific trades and professions which I was referring to, but they will support my statement adequately for the time being.

The average family income, effective buying income after taxes, in 1938 was \$2,116. In 1954, it was \$5,274. In Michigan, in 1954, that figure was \$5,806 compared to a national average of \$5,274. These figures are from *Sills Management Survey of Buying Power*, the annual edition, and it is available to anyone.

The source material for physicians' income, non-salaried classification, in 1938 was \$4,093; in 1951, \$13,432. These figures have not been compiled since 1951 by this source. This is the Statistical Abstract of the United States for 1955.

I did refer to Michigan physicians' incomes as being the highest in the United States—\$14,831 for Michigan, if I remember correctly, which was the highest average of any state in the United States. I would like to simply say that when we quote figures, percentages, up here, we sometimes make mistakes. These are mistakes of the brain and not of the heart, and if you will just give us time and opportunity we will dig out the source of information from which these statements are made.

Thank you. That is after taxes and overhead.

THE VICE SPEAKER: If there are any members of the press here, I hope they will take this next question easy and consider it off the record and off the cuff, and all that sort of thing. The question is this:

"How can I make more money and do no work?"

[Laughter]

I don't know who sent this in. We shall appoint a subcommittee; that will take care of it.

The next question:

"Is it necessary or desirable to extend fully prepaid medical service to all segments of the population rather than to just low income groups?"

MR. KETCHUM: I touched on this point in the paper I gave you before lunch. I don't think there is any doubt that the idea of restricting voluntary prepayment to low income classes has been completely rejected by most of the public. The value of prepayment or insurance for the costs of health care has been proven, has been accepted, by all classes of people.

We talked to the officials of General Motors, Ford, Chrysler and such organizations as that. They are as much concerned with their own security in this matter of health care as is the rank and file on the machines. As a matter of fact, and this I can tell you from my own personal situation, for the salaried executive today security is just as much a will o' the wisp as it is for the man on the machine.

The average salaried executive faced with a long, prolonged and expensive illness is going to be in just as much hot water, and maybe more, because of the weakness of the executive today in business of living up to his income. Almost everything he buys, including his home, his car, his yacht, his club memberships, is bought on a time payment basis. Perhaps you men are exceptions, but I doubt it. It is true of everyone in every walk of life in almost every economic classification, and this is only a method of creating and extending credit in the health payment field.

It is accepted generally. It would have been accepted by the government in connection with the MEDICARE dependents, except that there is an overriding principle involved in that particular insurance. The dependents of the armed services are wards of the government by virtue of the obligation assumed by government, and are not people to be insured. The sovereign power does not need to buy insurance; it has all the wealth of all of its citizens, and it can tax it to get that wealth. Therefore, it was not necessary to buy insurance.

It was a fine point which was discussed over a period of three years in the Hoover Commission, to which I was an adviser, as to whether or not the government should buy insurance on a prepaid basis just as the employees of General Motors, Ford, Chrysler and the rest of them do, or whether they should simply buy and pay whatever it costs plus the overhead of administration. It was decided that only because it was a sovereign power taking care of its own people, and having a total obligation to see that these people got care and not just help in getting care, that they went the way they did in MEDICARE rather than buying voluntary insurance.

I don't think there is any question that you must amend the idea that voluntary prepayment is only for the lower income classes.

THE VICE SPEAKER: There are several other questions here which I am sure Jay is the one to answer, if he will.

"Can the \$2,500 medical service program be eliminated?"

MR. KETCHUM: It could be, and I doubt whether we would have too much trouble eliminating it, with a few exceptions. You all must realize that, for example the employers of S. S. Kresge, Woolworth, J. L. Hudson, Michigan Bell Telephone Company and several groups of that nature, employ people for small jobs, many on a part-time basis, whose earnings are definitely below the \$2,500 and \$2,000 levels. To force these people to buy the higher contract—the \$5,000, for example, in Michigan—would only increase the cost of medical care to these people, beyond the point which they are actually paying even though they are not insured.

Therefore, at the time the \$5,000 contract was instituted it was felt absolutely necessary to retain the \$2,500 contract for those classifications. Because of the nature of Michigan Medical Service being a foresighted public institution or, as Dr. Brandenburg called it, a public trust, we are forced to make available to any qualified applicant any of the contracts that we offer the public.

Therefore, in the approach to General Motors, Chrysler, Ford and the other large groups, there is selection within the group, if the group wishes it, as between the \$2,500 and the \$5,000 contract. We find some people with incomes well above \$5,000 buying a \$2,500 contract, hoping to utilize it as an indemnity contract.

I cannot answer as to whether or not the \$2,500 contract will be eliminated in the near future. There is consideration being given to it.

"Why does the non-group contract offer only hospital-surgical coverage and not medical care coverage?"

MR. KETCHUM: We are seriously considering making available a surgical-medical contract to the non-group enrollees (what we have called our community campaign enrollees) this coming year. There has been one reason why it has not been done in the past, and that is strictly in the area of cost or price. Most of the people who buy this contract are the unemployed, the underemployed, the older people who do not qualify under group, and therefore in an attempt to keep the price down and give us a fair break in selection, it has not been offered to this time. I am not promising, but I fully believe it will be offered this coming fall, probably in September.

"What proportion of the subscriber's premium goes to Blue Cross and what proportion to Blue Shield?"

MR. KETCHUM: This is a difficult question to answer except as to the total dollars involved, because of the variation in contracts held by the various subscribers. Blue Cross has four basic contracts. They have three or four supplemental contracts. Blue Shield has four basic contracts and several small supplemental contracts, so the situation would vary in almost every instance.

However, over-all, Michigan Blue Cross's income last year from its subscribers was about \$104,000,000. Blue Shield's was about \$44,000,000. So, that proportion just about represents the split for the average subscriber.

THE VICE SPEAKER: I find that the remainder of the questions have already been answered by previous speakers, and I want to thank you all very much for your attention during the time that these questions were presented. I shall now turn the meeting back to the speaker.

THE SPEAKER: Thank you, Dr. Lightbody. If you fellows by now are not authorities in insurance, you must have been asleep. You certainly have had an intensive course in prepayment insurance.

The time has come for discussion by members of the House of Delegates, or the introduction of resolutions or motions if you have them. I certainly think it is very obvious to all of us that this problem is something that cannot be settled today. It will require a great deal of very sincere and concentrated evaluation by you men to have the responsibility of deciding the principles by which Michigan State Medical Society shall operate.

I would like to read to you paragraph M, Section 10, Chapter VIII of the Bylaws:

"Each resolution introduced into the House of Delegates shall be in writing and presented in triplicate to the Secretary immediately after the delegate has read the same, and shall be referred to the proper reference committee by the Speaker before action thereon is taken."

As I said in my opening remarks, motions that may be presented, which are germane to accomplishing a purpose, I believe can be acted upon today. However, any resolutions that are submitted and which have in any way an effect of binding the House of Delegates or binding the members of the Michigan State Medical Society to any course of action, I believe properly should be referred to the proper reference committee.

The Chair will now entertain motions, resolutions, discussion by members of the House of Delegates. There is a microphone on each side of the room for your convenience; or if you wish to come up here, you are free to do so.

VII. PRESENTATION OF RESOLUTIONS AND MOTIONS

1. Resolution No. 1: Pathology Under Medicare

W. L. BROSIUS, M.D. (Wayne): I have been asked to present a resolution at this meeting by the Michigan state Pathological Society. The President's letter, requesting me to present it, is here. These two resolutions were circularized to the State Society of Pathologists, of which there are seventy-seven active members at the present time, with an expression requested from them as to whether they wish these resolutions to be presented or not. Fifty-four answered; fifty-two for, two against. These were written rather hurriedly, and probably the reference committee can dress them in phraseology in one or two places.

"Whereas, the American Medical Association and the Michigan State Medical Society have declared that the practice of pathology is the practice of medicine, and

"Whereas, pathology services may be rendered in or outside of a hospital, and

"Whereas, such pathology services can be performed only by or under the supervision of qualified physicians, and

"Whereas, Michigan Medical Service has contracted for the Michigan State Medical Society and for the physicians of Michigan and with the Department of Defense to supply medical services to dependents of the uniformed forces under Public Law No. 569 of the 84th Congress, otherwise known as the Dependent's Medical Care Act, or Medicare, and

"Whereas, certification of medical services rendered can be made only by physicians; therefore be it

"RESOLVED: That the Michigan State Medical Society hereby declares and affirms that pathology is a medical service under the terms of the contract which has been negotiated between the Michigan Medical Service and the Department of Defense, and as set forth in contract No. DA-49007 MD823, dated 16 November, 1956, issued by the Department of Defense in compliance with the Dependent's Medical Care Act, and fees for such services wherever rendered must be paid to the physicians rendering the service."

VII. 2. Resolution No. 2: Pathology in Blue Cross-Blue Shield

"Whereas, the Michigan Medical Service and Michigan State Medical Society have declared that the practice of pathologic anatomy and clinical pathology is the practice of medicine, and

"Whereas, the pathologic services whether rendered to inpatients or outpatients are medical services, and

"Whereas, such pathologic services can be performed only by or under the supervision of qualified physicians, and

"Whereas, Michigan Medical Service has contracted for the Michigan State Medical Society and for the physicians of Michigan to supply medical services to subscribers, and

"Whereas, certification of medical services rendered can be made only by physicians; therefore, be it

"RESOLVED: That the Michigan State Medical Society hereby declares that pathology is a medical service, and premiums for such services should be included in the Michigan Medical Service contracts rather than in the Michigan Hospital Service contracts; and be it further

"RESOLVED: That fees for such services be paid to the physicians rendering the service."

THE SPEAKER: These two resolutions will be referred to the proper reference committee when it has been appointed.

VII. 3. Resolution No. 3: Increased Benefits in Michigan Medical Service Contracts

E. H. FENTON, M.D. (Wayne): I have been asked to present this by the Committee on Prepaid Medical Care Plans of the Wayne County Medical Society:

"Whereas, the Committee on Prepaid Medical Care Plans of the Wayne County Medical Society has studied extensively the various methods of prepaid medical care available in the United States, and

"Whereas, it is the opinion of the Committee that a medical society may logically sponsor only a service type plan, and

"Whereas, the Committee has concluded that the general public desires wider benefits in a prepaid plan than are now available in Michigan Medical Service, and

"Whereas, an essential feature in such a plan should be a mutual sense of responsibility on the part of the physician and on the part of the patient, and

"Whereas, the traditional right of the patient to choose his own physician must be preserved; therefore, be it

"RESOLVED: That Michigan Medical Service be respectfully requested after a thorough study of actuarial factors to devise a contract providing increased benefits patterned on the General Electric Plan; and be it further

"RESOLVED: That this contract embody extensive diagnostic and therapeutic benefits to the subscriber in the hospital, office and home; provide for both an initial deductible feature and a co-insurance plan for more extended and expensive illness; and pay the physician without a fixed schedule his usual fee for a given service; and be it further

"RESOLVED: That this House of Delegates favors continuation of policies now being offered by Michigan Medical Service."

THE SPEAKER: This resolution will be referred to the proper reference committee when that committee is appointed.

VII. 4. Resolution No. 4: Limit Blue Shield Contracts to Those in Specified Income Limits

E. H. FENTON, M.D.: This resolution does not come from the Committee:

"Whereas, considerable confusion exists in the minds of the public in regard to income limits of their policies, and

"Whereas, fee schedules as set up in specific contracts tend to be accepted by the patient as usual fees for the various procedures, and

"Whereas, poor public relations may result when fees in excess of their Blue Shield contracts are charged; therefore, be it

"RESOLVED: That the Board of Directors of Michigan Medical Service be encouraged to initiate a plan as rapidly as possible by which Blue Shield contracts are limited to those individuals whose family income falls within the income limits of their policies; and be it further

"RESOLVED: That the corporate body of Michigan Medical Service go on record as favoring the discontinuance of the present \$2,500 policy, and a new contract for all incomes above \$5,000 be formulated."

THE SPEAKER: This resolution is referred to a reference committee when it has been appointed.

VII. 5. Motion No. 1: Authorizing Survey Determine Consumers' Attitudes on Services and Payments

J. R. RODGER, M.D. (Northern Michigan): I would like to present this motion:

In view of the fact that time is of the essence determining actions to be taken regarding prepaid insurance consistent with existing evolutionary trends and in view of the fact that a committee of this House of Delegates is currently considering certain specific phases of this problem, I move:

That to complement better the work of present committees, the Michigan State Medical Society Council or its Executive Committee be instructed to immediately conduct a survey to determine the attitude of the consumer public generally regarding services which should be offered, as well as the economic potential to pay for such services, and that it utilize any survey material or information already available together with such other facts as can be secured to effect that end, this survey information to be made available to this House of Delegates at the September, 1957, meeting through the Annual Report of The Council of the Michigan State Medical Society.

M. L. LICHTER, M.D.: I second the motion.

THE SPEAKER: I believe this motion is proper for action by the House of Delegates at this special session. There has been a second by Dr. Lichter, Dr. Stande and Dr. Heidenreich. What is your pleasure? Is there discussion of this motion? The Speaker's interpretation of this motion is that in addition to the study committee that is already studying some of the phases of this matter, this motion directs The Council and/or its Executive Committee to further complement the effort of this committee to get adequate information from the public as to what it wants and its ability to pay for it for future decision by this House in September.

Is there discussion?

R. A. RASMUSSEN, M.D. (Kent): I would like to amend the motion, that it include a survey of the doctors' wishes.

THE SPEAKER: I am not sure the motion stated such a fact. I suppose it was implied, but do you wish to make it in the form of an amendment, that it include a survey of the doctors' wishes? Do you care to elucidate on that? What do you mean by "the doctors' wishes"—as to whether they want a service plan or indemnity plan, or what?

R. A. RASMUSSEN, M.D.: I think, as it is stated now, it would include a survey of the wishes or desires of the consumer. I think, too, that the doctor involved in this whole problem, and to stimulate his interest it would be well to survey his thoughts on the matter.

THE SPEAKER: If I understand, Doctor, do you wish to specify it any more particularly, or do you just want to leave it a blank wish, and that's all? It is a right the way you have it.

R. A. RASMUSSEN, M.D.: If you want to add to it it might be well to get his impression of the needs.

OTTO VANDER VELDE, M.D. (Ottawa): I second the amendment.

THE SPEAKER: We shall dispose of the amendment. Is there further discussion of the amendment? Are those in favor of the amendment that the physician be polled as to his wishes in this matter, say "aye"; or opposed, "no." The amendment is lost.

Now, may we have discussion on the original motion?

R. L. NOVY, M.D.: I ask a question: Where is the money coming from? It is not provided for in the motion itself. I do know that we did conduct a poll way back in 1943 or 1944, and at that time it cost \$15,000. I don't know what it would cost now, and

it was supposed to be a cut rate that we were given that time.

THE SPEAKER: Is Dr. Shook in the room? The statement has been made but not verified that it is going to cost considerable money to conduct a survey as was suggested by the motion. Do we have the money?

RALPH W. SHOOK, M.D. (Kalamazoo): I think it would be up to the House of Delegates to decide where we were going to get the money—whether you want to use it. It is not in the budget. If you conduct a survey, my impression is that it is going to take longer than three or four months.

DR. SCHILLER, M.D. (Wayne): I would like to point out that in the last four or five years there have been surveys made in practically every state. It is hard for me to believe that Michigan is so different that we can't use the judgment that has been obtained through these various surveys and apply it to the business of the state of Michigan.

G. W. SLAGLE, M.D.: The consensus was that there is a lot of survey material available. There are research units in the various colleges and universities, and The Council or its representatives have not had a chance to discuss in great detail how much it might cost. It was left that The Council, within the next two or three weeks, would be able to compile what would be available, and would have some idea of what it might cost. The figures as represented by the group were nowhere near \$10,000 or \$15,000. It was a matter of only a few thousand dollars that it might cost. In our Public Relations reserve fund there is an adequate amount to take care of something like this, if it is approved by the House of Delegates.

J. D. FRYOGLE, M.D. (Wayne): May I suggest a way to take a poll without spending very much money except for the tabulation? We might use our good friends in the newspaper business or other publications. Everybody loves to answer quiz questions, and such a poll publicized in the local papers in the various communities throughout the State, and returned to a box number, might be tabulated.

I would not vote for the accuracy of such a poll, but it certainly would be a good cross-section sampling of our State, and it might be good publicity in the sense that if the doctors were requesting it, it would impress upon the people the fact that we are concerned with their wishes and that we want a good cross-sectional answer from them. It might be very informative, although I don't know if it has ever been done that way.

A. C. STANDER, M.D. (Saginaw): I would like to ask whether we are meeting solely now as members of the House of Delegates, or whether we are meeting as members of the corporate body of Michigan Medical Service.

THE SPEAKER: This is a meeting of the House of Delegates.

A. C. STANDER, M.D.: I understand we also are members of the corporate body of the Michigan Medical Service.

My opinion is this: Before we venture on any changes in contract of the Michigan Medical Service, any changes at all should be made should be made with adequate deliberation and with adequate information.

At the MSMS County Secretaries-Public Relations Conference last January, I was very definitely impressed

Mr. John Reid of Lansing who said, "Labor always asks for more than they expect to get, and they have very well-trained bargainers."

I think we should get as much information as possible before we consider contract changes, and we certainly should find out what the people want who are going to get the benefit and pay for these contracts.

I just wonder whether there is any obligation on the part of Michigan Medical Service to acquire that information and to spend some of the money in obtaining this information.

THE SPEAKER: The question has been called for. Is there further discussion?

S. L. LOUPEE, M.D.: I would like to ask someone in authority whether this resolution as it appears would permit the accumulation of facts with reference to the acceptance of Blue Shield by the people of the State of Michigan, from the data which are already at hand. There are many sources of data, as has been mentioned here. There are other ways of getting an appreciation of the way the people feel about it, other than to go from house to house or town to town and find out. We could make it simple and inexpensive. It might not be considered quite as accurate, but it would give us a very good idea.

If that would be permitted, then I am for this thing. If not, I am not sure how we could get through with it between now and September, so I would be against it.

THE SPEAKER: If I recall the motion correctly, it specifically stated that all sources of information that are now available from surveys will be utilized. It is only a motion to complement the work of the committee of your House which is already working on the matter.

S. L. LOUPEE, M.D.: That being the case, I shall vote for it.

THE SPEAKER: Is there further discussion? The question has been called for, and I believe it is in order to now put it to a vote. All those in favor of this motion, please say "aye"; opposed, "no." The motion is carried.

Are there further resolutions or motions?

VII. 6. Resolution No. 5: Recognition of Internists

N. J. HERSHEY, M.D. (Berrien): I present this resolution at the request of the Michigan Society of Internal Medicine:

"Whereas, this House of Delegates, as representatives of the medical profession in Michigan, is dedicated to promote higher standards of medical service, and

"Whereas, the maintenance of high standards of medical care often includes the services of the internist, and

"Whereas, this House of Delegates is anxious to maintain unity of the medical profession in Michigan in order to further favorable solution of the economic problems of medical care; therefore, be it

"RESOLVED: That the House of Delegates recognizes the internist as a medical specialist whose special training, skills and detailed investigation and service rendered the patient entitles him to compensation commensurate with such service both as an attending physician or consultant."

THE SPEAKER: This resolution will be referred to a reference committee when it is appointed.

O. J. JOHNSON, M.D. (Bay): I would like to read the notice of this meeting: "The purpose of this meeting is to acquaint you with the various crises and problems facing the profession with regard to future prepaid health insurance in this State."

I think you have done so very adequately. I think the resolutions here presented, deciding whether internists are specialists or pathologists are doctors, are not germane to the calling of this meeting. I do not see how we can conduct any business.

THE SPEAKER: It is your privilege to rise to a point of order. The Chair would simply like to explain that this matter revolved around in his mind from supper to breakfast for several nights in a row, and he finally decided that, rather than create any ill-will, it would be better to accept these resolutions and have them referred, as is the proper sequence, to the reference committees when appointed.

I appreciate that your statement, Dr. Johnson, is absolutely true. I think it would be perfectly within the prerogative of the Chair to rule otherwise, but this

is the ruling of the Chair. If you wish to appeal it, I think these resolutions can properly be disregarded. This is the way it is being handled at the present moment; as long as we already have some resolutions committed, we will proceed unless we get too far distant.

J. R. RODGER, M.D.: Do you mean these resolutions will be referred to reference committees that will report back on them next September and be made clear?

THE SPEAKER: That is the point. They will be clear, if you didn't understand them.

VII. 7. Resolution No. 6: Change Michigan Hospital Service-Michigan Medical Service into Indemnity Plans

DR. KELLEHER, M.D. [Calhoun]: After reviewing the problems that have been presented to it by representatives of the Michigan State Medical Society, and following a ballot vote of the Calhoun County Medical Society, its delegates have been instructed to present the following resolution to the special meeting of the House of Delegates of the Michigan State Medical Society:

"RESOLVED: That the Calhoun County Medical Society hereby requests the Michigan State Medical Society to give consideration to the employment of its influence and good offices to effect some or all of the following changes in Michigan Hospital Service-Michigan Medical Service:

- "1. Discontinuance of the 'service' concept.
- "2. Adoption of a deductible hospitalization plan.
- "3. Adoption of an indemnity fee schedule for physicians' services.
- "4. Adoption of an indemnity fee schedule for outpatient or office diagnostic x-ray examinations.
- "5. Payment of surgical indemnity fees regardless of where the surgery is performed."

THE SPEAKER: This resolution will be referred to a reference committee when it is appointed.

VII. 8. Motion No. 2: Encouraging Extended Coverage of Service Contracts

H. A. FURLONG, M.D.: It is very apparent that a great deal of study has been made by the Board of Directors and the officers of the corporation, and that there is much yet to be done. There are many problems yet to be met. This effort must be carried on. Therefore, the Oakland County delegation would like to present this motion:

That this House of Delegates expresses by this motion its unqualified confidence in the Board of Directors and officers of Michigan Medical Service for their management of the affairs of the corporation, and encourages them to continue to evolve plans for extended coverage of service contracts in conformity with present demands and in anticipation of future needs within the limits of sound actuarial experience and reasonable cost.

Further, that the Michigan State Medical Society intensify its efforts to demonstrate the advantages to be achieved by the close partnership of the public and the profession in this effort.

W. L. BROSIUS, M.D.: I second the motion.

THE SPEAKER: Is there discussion of the motion? The question is called for. All those in favor, say "aye"; opposed, "no". The motion is carried.

Is there any further business at the present moment? If not, I would like to call on three men for announcements, Dr. Foster, Dr. Wickliffe and Dr. Wiley. Will those three men come up quickly and make their announcements, after which we will have a brief summation by President-elect Slagle and immediate adjournment after Dr. Slagle has finished his remarks.

SECRETARY FOSTER: I have two announcements that are of a rather pleasant nature. They have to do with legislation.

Your attention is invited to the fact that House Bill 515, a legislative proposal introduced in the present session by the Ways and Means Committee of the House which would have you re-register at \$10 a year, has been referred back to the committee and is going to lie there for another year. You will recall that The Council approved a re-registration act last year, and then the House of Delegates disapproved.

The Ways and Means Committee not only raised the original \$5, not only considered it, but raised it to \$10. The bill has been returned to committee, and it is hoped you will thank your legislators when you get home for what they did.

The second announcement is that the proposal for polio vaccine, some \$400,000-odd in the budget, which was to be used only in public health clinics, taking it away from the doctors' offices, where 75 per cent of the work had been done, was passed with the amendment off. That is going to preserve for you in the coming year this segment of private practice, so thanks again to our State Senators and Representatives.

J. T. P. WICKLIFFE, M.D. [Houghton-Baraga-Keweenaw]: I want to take this opportunity to extend a cordial invitation to all Michigan State Medical Society members to attend the 69th annual meeting of the Upper Peninsula Medical Society of Michigan. We shall have a good scientific program. The meeting will be at Houghton, on June 21-22. We would like to have you all come up.

THE SPEAKER: Thank you, Dr. Wickliffe. We shall all be there.

D. BRUCE WILEY, M.D.: I would like to invite to your attention the fact that last year, during the summer Councilor Conferences were held throughout the State. Last September, this House of Delegates authorized The Council to arrange these Councilor Conferences again this year, in each of the districts.

After this meeting, you will probably want to hold your Conferences earlier than you did last year so that after you have had your county medical society meetings these matters may be discussed, and this particular question, along with the other matters pertaining to the problems of the State Medical Society that will be coming up in the September annual session of the House of Delegates, will be brought to the Conference in each district. By scheduling these conferences earlier, it will give the State Society officers a better opportunity of fitting such meetings into their busy schedules.

THE SPEAKER: May I take this opportunity to thank each member of the House for his attendance, and each alternate, the officers of the county societies and the participants on this program. As soon as Dr. Slagle finishes his summary, we shall adjourn.

VIII. SUMMATION

By G. W. Slagle, M.D.

I want to compliment each member of the House of Delegates and guests for their attendance during this whole day. A lot has been tossed your way, and there has been much to digest. We know that in the next few months there is a big job to be done.

My charge is simply to go back home, disseminate this to each individual member, discuss it in the hospital lounges and at staff meetings, and do not hesitate at any time to call on the representatives of MSMS and Blue Shield to meet with you and go over anything that may be troubling you.

Think it over thoroughly, make good decisions, and go to Grand Rapids in September ready to get together as a united profession. We will whip this thing and will come out on top as we did in 1940.

IX. ADJOURNMENT

THE SPEAKER: The meeting is adjourned.

[The meeting adjourned sine die at 4 p.m.]

FOR POSITIVE DIURESIS

ROLICTON[®]

Brand of Amisometradine

- oral b.i.d. dosage
- continuous control of edema

The new, highly effective oral diuretic, Rolicton, greatly simplifies the task of maintaining an edema-free state in the patient with congestive heart failure. Rolicton meets the criteria for a dependable diuretic: continuous effectiveness, oral administration and clinical safety.

In extensive clinical studies the diuretic response clearly indicates that a majority of patients can be kept edema-free with Rolicton. In these investigations it was noted that side reactions were uncommon. When they did occur they were usually mild.

In most edematous patients Rolicton may be employed as the sole diuretic agent. When used adjunctively in severe cases, Rolicton is also valuable in eliminating the "peaks and valleys" associated with the parenteral administration of mercurial diuretics.

One tablet of Rolicton b.i.d., after meals, is usually adequate for maintenance therapy after the first day's dosage of four tablets. Some patients respond well to one tablet daily. G. D. Searle & Co., Chicago 80, Illinois. Research in the Service of Medicine.



SEARLE

Michigan's Department of Health

Albert E. Heustis, M.D., Commissioner

SUMMER IMMUNIZATION

The Michigan Department of Health recommends:

1. That the routine immunization of infants against diphtheria, pertussis, tetanus and smallpox be continued throughout the so-called poliomyelitis season.
2. That because of our high percentage of protection against diphtheria, tetanus and whooping cough in older children and with a very low incidence of these three diseases in Michigan there would be no objection to delaying booster doses or primary immunization of older persons until later on in the year.
3. That poliomyelitis vaccinations be continued throughout the so-called polio season.
4. That poliomyelitis vaccine not be given to household contacts of a case of poliomyelitis.
5. That antigens not be given to persons showing signs of illness.

CHANGE IN LABORATORY TESTING PROCEDURES

The Department of Health has found on review of experience with antibiotic sensitivity testing that the use of more than one of the Tetracycline drugs in testing adds no useful information. There is uniform agreement between the results obtained with all Tetracycline antibiotics. Bacitracin, Neomycin, Polymyxin B and Viomycin are of little clinical usefulness. We are therefore restricting routine testing to the following antibiotics: Chloromycetin, Erythromycin, Penicillin, Streptomycin, and Tetracycline.

Routine gross testing of fecal specimens has been discontinued. If requested, the Department will perform antibiotic sensitivity tests on pure cultures of known pathogenic bacteria when isolated from fecal specimens.

STATE SOCIETY MEMBERS ON RADIO PROGRAM

Beginning in the fall of 1956, the Michigan Department of Health's weekly radio program has been aired over a statewide network of radio stations. Several members of the State Medical Society have participated in the broadcasts.

The first series of programs was devoted to maternal and child health and included most of the material covered in expectant parent classes as well as a number of shows on the health of the preschool child. In addition to health department staff members, featured guests on this series were Dr. Francis Jones, Lansing, Chairman of the Maternal Health Committee, who spoke on the hygiene of pregnancy, and Dr. Robert Heavenrich, Saginaw, Chairman of the Child Health Committee, who spoke on growth and development.

The second series of programs, now in progress, deals

with various aspects of the chronic disease problem. Featured guests on this series include Dr. Frederick Swartz, Lansing, member of the Geriatrics Committee, who discussed aging and long term illness; Dr. Robert Stow, Lansing, who discussed heart disease; Dr. Frank van Schoick, Jackson, member of the Rheumatic Fever Committee who spoke on rheumatic fever; and Dr. George Thosteson, Detroit, who will discuss diabetes.

The programs are broadcast originally over station WKAR in East Lansing. Tape recordings of these broadcasts are then sent to thirteen radio stations throughout the state for rebroadcast at a later date.

PUBLIC HEALTH NURSES STILL IN SHORT SUPPLY

The number of public health nurses at work in Michigan has not kept up with the population increase, according to a recent census conducted by the Michigan Department of Health.

As of February 1, there were 896 full-time and seventy-eight part-time nurses employed by all types of agencies for public health work in the state. The full-time nurses have increased forty-two in the last two years, a gain of approximately 5 per cent. Michigan's population gain in that time was 7 per cent.

Of the 896 full-time public health nurses in the state, 51 per cent have completed a year of public health training. Of this number, thirty-one are graduates of basic collegiate nursing programs which are accredited for public health. Wayne State University has one of these accredited programs. Twenty per cent of the nurses have had less than one year of preparation and 29 per cent have had none. A total of forty-seven (5 per cent) have master's degrees. Eleven of these are in state agencies and thirty-six in local agencies. Bachelor's degrees are held by 274 nurses (31 per cent of the total number).

NEW OFFICERS OF MICHIGAN PUBLIC HEALTH ASSOCIATION

C. V. Tossy, D.D.S., of Lansing, was elected president of the Michigan Public Health Association at the organization's thirty-sixth annual conference in Grand Rapids in May. Robert G. Willson, D.V.M., of Detroit, was chosen vice-president and G. Frederick Moench, M.D., of Midland, was named secretary. Lyman Chamberlain, of Charlotte, was continued in the office of treasurer.

The American Red Cross in 1956 collected 2,130,000 pints of blood—almost a hundred thousand more than the previous year.

CORN OIL LOWERS serum cholesterol

Physicians are well aware of recent reports that blood cholesterol levels tend to decrease significantly in humans when a substantial part of the dietary fat is supplied as polyunsaturated vegetable oil. Many clinical and experimental studies have shown Mazola Corn Oil to be particularly effective as a cholesterol-reducing agent.

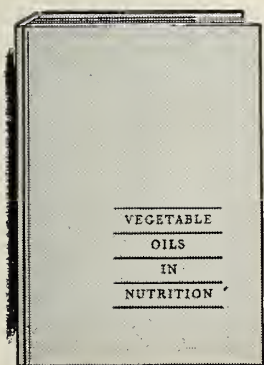
In the dietary management of blood cholesterol levels it is practical to decrease the total daily intake of fat and substitute Mazola Corn Oil for a substantial amount of the saturated fat. Corn oil can be included in the daily diet as salad dressings and in a variety of other ways* without the usual inconveniences of dieting. Mazola Corn Oil is a product everyone knows, respects, enjoys and keeps on hand.



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NEWS MEDICAL

MICHIGAN AUTHORS

J. Reimer Wolter, M.D., Ann Arbor, is the author of an article entitled "Retinitis Pigmentosa" published in *AMA Archives of Ophthalmology*, April, 1957.

Elisha S. Gurdjian, M.D., John E. Webster, M.D., Francis A. Martin, M.D., and Warren G. Hardy, M.D., Detroit, are the authors of an article entitled "Carotid Compression in the Neck—Results and Significance in Carotid Ligation," read before the Section on Nervous and Mental Diseases at the 105th Annual Meeting of the American Medical Association, Chicago, June, 1956, and published in the *Journal of the American Medical Association*, March 23, 1957.

Charles Dorando, B.A., and Max Karl Newman, M.D., Detroit, are the authors of an article entitled "Bracing for Severe Scoliosis of Muscular Dystrophy Patients," published in the *Physical Therapy Review*, April, 1957.

Jack Lapides, M.D., was the moderator, and James Pierce, M.D., Sheldon Fellman, M.D., Jack Bobbitt, M.D., James Coppridge, M.D., Ralph Straffon, M.D., and James Morrow, M.D., all of the Department of Surgery, University of Michigan Medical School in Ann Arbor, were the participants in a symposium presented for the Section of Urology Seminar on December 11, 1956, entitled "Renal Tubular Acidosis: A Review," published in the *University of Michigan Medical Bulletin*, March, 1957.

Lloyd J. Lemmon, M.D., Pittsburgh, Arthur L. Drew, M.D., Indianapolis, and Janice G. Glimm, M.D., and James E. Higgins, M.D., Ann Arbor, are the authors of an article entitled "Study of Cerebrospinal Fluid Proteins with Paper Electrophoresis. III. The Guillain-Barré Syndrome (Preliminary Report)," published in the *University of Michigan Medical Bulletin*, March, 1957.

Theodore G. Osius, M.D., Ann Arbor, is the author of an article entitled "The Historic Art of Poisoning," published in the *University of Michigan Medical Bulletin*, March, 1957.

Leo S. Figiel, M.D., and Steven J. Figiel, M.D., Detroit, are the authors of an article entitled "Gallstone Obturation of the Duodenal Bulb," published in the *American Journal of Roentgenology, Radium Therapy and Nuclear Medicine*, July, 1956.

D. K. Rush, M.D., L. S. Figiel, M.D., and S. J. Figiel, M.D., Detroit, are the authors of an article entitled "Rokitansky-Aschoff Sinuses, Historical Review and Presentation of Three Cases," published in *The Grace Hospital Bulletin*, January, 1957.

S. J. Figiel, M.D., L. S. Figiel, M.D., and H. A. Shulman, M.D., Detroit, are the authors of an article entitled "Gas Within the Fetal Circulation Indicating Fetal Death," published in *The Grace Hospital Bulletin*, January, 1957.

J. S. DeTar, M.D., Milan, is the author of an article entitled "The Generalist, the Hospital and the AMA," which was part of a symposium on "Methods of Evaluating Medical Care in Hospital," presented before the 86th annual session of the Colorado State Medical Society, September, 1956. The article was published in the *Rocky Mountain Medical Journal*, December, 1956.

* * *

S. J. Figiel, M.D., L. S. Figiel, M.D., and D. K. Rush, M.D., of the Department of Radiology, Grace Hospital, Detroit, Michigan, presented a paper and exhibit on "High KV Spot Compression Roentgenology for Detection of Colonic Polyps" at the annual meeting of the American Proctologic Society held at New Orleans, April 22-27, 1957.

* * *

M. K. Newman, M.D., Detroit, presented a paper before the Wayne County Chiropractic Society at the Veteran's Memorial Building on April 2, 1957. The title of the talk was "A Comparison of Objective Examination in Peripheral Arterial Circulation: Calorimetry, Thermometry, Digital Plethysmography and Radio Isotope Tracer Techniques."

* * *

Paul R. Dumke, M.D., was chairman of the Program Committee for the Second All-Day Meeting of the Michigan State Society of Anesthesiologists, held on May 25, 1957 at the Hotel Statler in Detroit. Appearing on the program were: Ivan B. Taylor, M.D., N. M. Bittrich, M.D., Arch V.R. Kane, M.D., Robert E. Mosher, Ph.D., Mary McLaren, M.D., Edward T. Glowacki, M.D., Shirley Austin, M.D., and William Myers, M.D., all of Detroit; Thomas B. Bolton, M.D., London, England; Daniel W. Johnston, M.D., William B. Jensen, M.D., Mary Lou Byrd, M.D., Richard C. Houghton, M.D., of Grand Rapids; E. M. Papper, M.D., New York, N. Y.; John B. Stetson, M.D., Ann Arbor; Edwin J. de Beer, Ph.D., Tuckahoe, N. Y.; Edward Connor, M.D., and I. D. Nickerson, M.D., Royal Oak, Michigan.

* * *

A paper entitled "Muscular Dystrophy in Terms of Its Evaluation, Prognosis, Diagnosis and Its Management by Physical Medicine and Rehabilitation" was

(Continued on Page 782)

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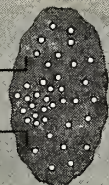
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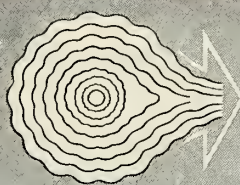
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(Continued from Page 780)

presented before the American College of Physicians on April 11, 1957 by M. K. Newman, M.D., Detroit

* * *

The Student American Medical Association Foundation, established to give financial aid to growing numbers of medical students in their last three years of training, has announced that twenty-four persons prominent in the fields of medicine, education, and industry have been named honorary trustees of the Foundation.

The honorary trustees, including two men from Michigan, who will serve in an advisory capacity are as follows:

Donald J. Cowling, Ph.D., past president, Carleton College, Minneapolis; Gerald D. Dorman, M.D., medical director, New York Life Insurance Company, New York; Gilson Colby Engel, M.D., surgeon, Philadelphia; Gunnar Gundersen, M.D., chairman, board of trustees A.M.A.; William A. Hyland, M.D., surgeon, Grand Rapids, Michigan; Ernest E. Irons, M.D., past president A.M.A., Chicago; L. D. Johnson, Jr., vice president Mead Johnson & Company, Evansville; Theodore G. Klumpp, M.D., president, Winthrop Laboratories, New York; Harry J. Loynd, president, Parke Davis & Company, Detroit; Edward J. McCormick, M.D., past president, A.M.A., Toledo; Walter Martin, M.D., past president, A.M.A., Norfolk, Va.; J. Roscoe Miller, M.D., president, Northwestern University, Evanston; Franklin Murphy, M.D., chancellor, University of Kansas, Lawrence, Kansas; W. A. Patterson, president, United Air Lines, Chicago; William Alan Richardson, editor, Medical Economics, Oradell, New Jersey; Edward C. Rosenow, Jr., M.D., physician, Pasadena, California; John G. Searle, president, G. D. Searle & Company, Chicago; Austin Smith, M.D., editor, Journal of the American Medical Association, Chicago; George F. Smith, president, Johnson & Johnson, New Brunswick, N. J.; Faustin J. Solon, vice president, Owens-Illinois, Toledo; Henry Tenney, senior partner, Tenney, Sherman, Bartlett & Guthrie, Chicago; Ernest Volwiler, Ph.D., president, Abbott Laboratories, North Chicago; Thomas J. Winn, vice president, Chas. Pfizer, Brooklyn; and James C. Worthy, vice president, Sears, Roebuck & Company, Chicago.

* * *

The American Medical Association, through its Council on National Defense, sponsored its Fifth Annual National Medical Civil Defense Conference on Saturday, June 1, at the Waldorf-Astoria, New York City. Four Michigan men were participants in the program: Jack C. Greene, Director, Radiological Defense Division; Francis B. Stewart, Col. U.S.A.R. Consultant, Chemical and Biological Warfare Defense; Benjamin C. Taylor, Director, Engineering Office; and M. M. Van Sandt, M.D., Director, Medical Care Division, all of the Federal Civil Defense Administration, Battle Creek, Michigan.

* * *

The American Board of Obstetrics and Gynecology announces that applications for certification, new and

(Continued on Page 784)

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Family Physicians use

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SPECIFIC DESENSITIZATION

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specific results of any medication possible. Each treat-
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already have skin tested your patient, send your reac-
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(Continued from Page 782)

reopened, for the 1958 Part I Examinations are now being accepted. All candidates are urged to make such application at the earliest possible date. Deadline date for receipt of applications is September 1, 1957. No applications can be accepted after that date.

Candidates for admission to the examinations are required to submit with their applications, a typewritten list of all patients admitted to the hospitals where they practice, for the year preceding their application, or the year prior to their request for reopening of their application. This information is to be attested to by the Record Librarian of the hospital or hospitals where the patients are admitted and submitted on paper 8½ x 11. Necessary detail to be contained in the list of admission is outlined in the Bulletin and must be followed closely.

Current bulletins outlining present requirements may be obtained by writing to the Secretary's office: Robert L. Faulkner, M.D., American Board of Obstetrics and Gynecology, 2105 Adelbert Road, Cleveland 6, Ohio.

* * *

Disclosure that Dr. Frederick D. Mott is leaving John L. Lewis for Walter Reuther is new evidence that the latter's new Community Health Association in Detroit is an ambitious venture. Ever since his New Deal days in Farm Security Administration two decades ago, Dr. Mott has been a trail blazer in prepaid, group care. His decision to give up directorship of Miners Memorial Hospital Association of United Mine Workers and shift to the Michigan organization, founded and headed by Reuther, is assurance that CHA will be a dynamic undertaking. Dr. Mott will be executive director, effective September 1. He steps out of his present post on June 30, to be succeeded by his deputy, Dr. John Newdorp.—W.R.M.S., May 16, 1957.

* * *

British physicians are caught between spiraling costs and the Ministry of Health which in 1951 arbitrarily decided that all family doctors should earn the equivalent of \$6,200 a year. Costs of labor have risen 35 per cent, and the physicians asked an increase of 24 per cent, but were offered 5 per cent. They are threatening to resign in a body. They have been quoted as threatening to strike, but will instead carry on a fee for service basis, and send their bills to their patients—not the government. British medicine failed to form strong medical associations, and were given promises which were not kept. They are now convinced.

* * *

The American Psychiatric Association has set up a project to study ways by which a greater understanding of psychiatry can be conveyed to physicians in general practice. The project has been made possible by a grant from the National Committee Against Mental Illness.

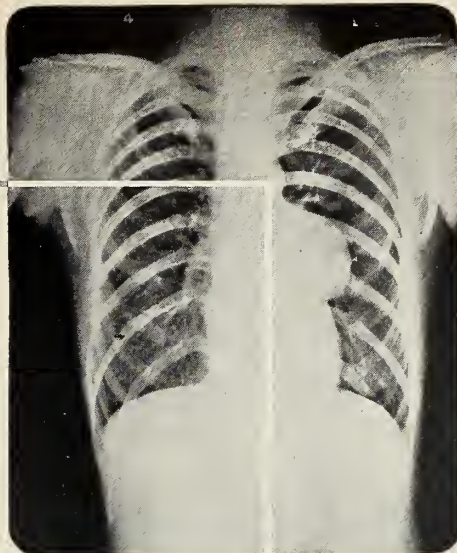
The project will be administered at the Central Office of the American Psychiatric Association under the Medical Director, Daniel Blain, M.D., Washington, D. C. A Liaison Committee with the American Academy of

(Continued on Page 786)

chances are 3 to 1 it'll be a Chest Film*...

You might suppose a good chest film would be easy to take. Yet this "simple" examination is often very troublesome. The trick is to get consistent *uniformity* so films of a given patient taken at long intervals will always be dependably comparable in density and contrast. If you're an expert technician, you juggle kilovoltage, time, milliamperage and focal spot to suit each patient. If you're not, you guess... *wrong*, too often.

There's no guessing, though, when you work with a Picker "Anatomic" x-ray control. It automatically integrates and sets up the whole complex of correct exposure factors for individual parts of individual patients. *You need no charts, make no calculations.*



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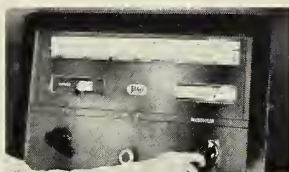
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HEART

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1 dial the bodypart
this chest station is one of
22 bodypart stations



2 set its thickness
to the measured thickness
of the part



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Companion to the Picker Anatomomatic control is this efficient "Century" x-ray table... a table with the rich look you'd expect to find only in upper-bracket x-ray equipment. The single tube converts from fluoroscopy to radiography and vice versa in a jiffy. 100 ma and 200 ma models.

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1. Pollock, B. E., and Pruitt, F. W.: *Am. J. M. Sc.*, 226:172, 1953.

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(Continued from Page 784)

General Practice will serve the project in an advisory capacity.

The Liaison Committee has proposed that the general urgent need for expanding psychiatric services in communities throughout the nation can most readily and practicably be met by general practitioners if they can be armed with appropriate basic knowledge of psychiatric skills and practices. Ways must be explored to accomplish this—by setting up model post-graduate courses developing standards for training, training films, course materials, and above all a broad promotional effort which will stimulate the general practitioner's interest in psychiatry and community action in this area.

* * *

Plans for the Midwest Cardiac Conference, to be held October 3, 4 and 5, 1957, at the Iowa State University Hospitals in Iowa City, have been announced by the Iowa Heart Association, co-sponsors of the scientific session. No registration fee will be charged.

* * *

The Detroit Dermatological Society, at its annual meeting, April 24, 1957, elected to office for the year 1957-1958, the following:

President.....Coleman Mopper, M.D.
President-elect.....George B. Sexton, M.D.
Secretary-Treasurer.....Alice E. Palmer, M.D.
Recorder.....Robert E. Burns, M.D.

Dr. Sexton is a resident of London, Ontario, Canada. The other officers are from Detroit.

* * *



For every 10,000 people x-rayed through community-wide surveys using small film mobile x-ray units, eight active cases of tuberculosis are found in Michigan.

In 1955, the most recent year for which complete figures are available, mobile units x-rayed 12 per cent of Michigan's population fifteen years of age and older. In only three counties 50 per cent or more of the adult population was screened. Mobile units operated in fifty-nine counties, mostly on a community-wide basis. On the average, 14 per cent of the adults of these fifty-nine counties were x-rayed in 1955.

Unknown, untreated cases of tuberculosis are the sources of new infections and new cases. If the new cases are not discovered, tuberculosis will continue to spread to countless other persons.—MICHIGAN TUBERCULOSIS ASSOCIATION.

* * *

The American College of Gastroenterology announces that its annual course in Postgraduate Gastroenterology will be given at The Somerset in Boston, Massachusetts, on October 24, 25, and 26, 1957.

The course will again be under the direction and chairmanship of Owen H. Wangenstein, M.D., Professor of Surgery of the University of Minnesota Medical School, who will serve as surgical co-ordinator and I.

(Continued on Page 788)



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(Continued from Page 786)

Snapper, M.D., Director of Medical Education, Beth Hospital, Brooklyn, N. Y., who will serve as medical co-ordinator. Drs. Wangenstein and Snapper will be assisted by a distinguished faculty selected from medical schools in the Boston area.

The subject matter to be covered in the course, from a medical as well as surgical viewpoint, will cover essentially, the advances in diagnosis and treatment of gastrointestinal diseases and a comprehensive discussion of diseases of the mouth, esophagus, stomach, pancreas, spleen, liver and gall bladder, colon and rectum, with special studies of radiology and gastroscopy.

For further information and enrollment, write the American College of Gastroenterology, 33 West 60 Street, New York 23, N. Y.

* * *

Thomas Francis, Jr., M.D., Chairman of the Department of Epidemiology in the University of Michigan School of Public Health, has evaluated the 1954 field trials of the Salk vaccine. He advises the booster as a safety measure "until we have a much firmer picture of the lasting potency of the vaccine." He suggests children and teen-agers should get the booster to help "make sure the vaccine has an opportunity to exert its full effect."

He does not recommend that the Salk booster should become an annual affair, however. Citing the fact that this is only the third year the vaccine has been used on a national basis, Dr. Francis says boosters will probably be needed less frequently as improvements in the potency and consistency of the vaccine are made.

Should a shortage of vaccine occur, Dr. Francis believes the under-twenty age group should receive first priority in getting their initial series of three shots. Children who had the series a year or more ago should receive second priority for vaccine.

* * *

The current fad for non-fat diets runs the risk of doing irreparable harm to liver and kidneys, a Dearborn heart specialist recently stated.


Lessem J. Baer, M.D., in a talk before the Michigan Dietetic Association, said: "There is still much to be learned about the harmfulness of fat in the diet." He advised the public to "pay no attention to the current advice about unsaturated fatty acids, unless under the direct advice of a physician." A diet composed of no more than 25 per cent fat is restricted to a level that is safe, he added.

Dr. Baer noted atherosclerosis has been with man since the days of early Egypt. Evidence of it has been found in mummies 3,000 years old. "In those days people did not have alcoholic beverages as we have today, nor did they have too much food," he said. "But they did have taxes and they certainly experienced psychological stress."

* * *

The International Society of Internal Medicine has announced that its Fifth International Congress of Internal Medicine will be held at the new Sheraton Hotel in Philadelphia, Pennsylvania, April 24-26, 1958. The






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be the first meeting of the Society outside of Europe. Making the announcement, the International Society's President, Sir Russell Brain, who is also President of the Royal College of Physicians of London, said, "The Executive Committee of the Society has chosen the United States for its Fifth Congress in response to an invitation extended by the American College of Physicians and with the objective of securing greater American participation in its deliberations and of inviting foreign members, at first hand, to learn more about American developments in the medical sciences."

The previous Congresses, at two year intervals, were held in Paris, London, Stockholm and Madrid. At those meetings, however, the United States, as well as many other nations throughout the world, was represented. The present membership of the Society, including forty-two nations, is about 3,000.

The objectives of the Society, as stated in its Statutes, "to promote scientific knowledge in internal medicine, to further the education of the younger generation and to encourage friendship among physicians of all countries." The members are "specialists in internal diseases, acknowledged as such and accepted by the appropriate national societies of internal medicine."

At the Philadelphia Congress it is planned, through lectures and panels, to analyze medical achievements of world-wide significance, to evaluate certain apparent problems and to chart courses of action designed to advance technical knowledge and to aid in the continuing war against disease. At the same time, the plan includes such social and cultural activities as will tend to promote co-operation, friendship and mutual understanding among physicians and peace among their countries.

The 1958 Annual Session of the American College of Physicians will occur in Atlantic City, April 28 to May 1 immediately following the Philadelphia Congress. The members of the Congress are invited to attend all the scientific programs and extensive exhibits (the foreign members on a purely courtesy basis). Also, those members of the Society who make an early reservation and advance payment, may join certain Fellows of the College on its customary post-convention cruise to a nearby foreign country. Tours throughout the United States may be arranged through an approved travel agency.


* * *

The Association of Military Surgeons of the United States will hold its annual convention at the Hotel Tuckahoe, Washington, D. C., October 28-30, 1957. The convention will have as its theme, "Professional Excellence—The Criterion of Military Medicine."

Originally, the association was organized to work for "advancement of military and accidental surgery and other things pertaining to the health and welfare of the military soldier," and was restricted to membership by military officers of the National Guard. Although the objectives of the organization remain the same, membership is now open to all present and former officers of the Medical, Dental, Veterinary, Medical Service, Nurse, and Medical Specialist Corps of the Army, Navy and

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Air Force, as well as personnel from the Public Health Service and Veterans Administration.

Each year the convention draws approximately 2,000 members from all parts of the nation as well as leading medical members of military organizations from other countries.

* * *

The President's Committee for Traffic Safety believes that you can help reduce accidents by obtaining (1) uniform laws and ordinances, (2) education in all schools, (3) enforcement officers who are specially trained, (4) an active accident records bureau, (5) an effective motor vehicle administration including improved driver examinations and re-examinations of repeated violators, (6) traffic engineering principles, and (7) adequate public information and support.—*Genesee County Medical Bulletin*.

* * *

Harold F. Falls, M.D., associate professor of ophthalmology at the University Medical School, advises that "children surviving enucleation (removal of the eyeball) for retinoblastoma should make a decision about sterilization."

Each year this cancer of the eye causes an increasing number of parents to face the decision of whether to allow doctors to remove one or both of their children's eyes so the youngsters may live.

Retinoblastoma, which appears in children between the ages of two months and four years, presents not only immediate danger to the youngsters, but perhaps long-run impairment to the genetic make-up of future generations.

It is definitely known that if either parent has the disease and has survived, the parent may transmit the gene to half his children. Chances are "extremely remote" that offspring will turn up with the disease no others in the family have it.

* * *

Scientists need both freedom and funds to be highly productive, a University of Michigan study conducted by the Survey Research Center (SRC) of the University Institute for Social Research, shows.

The study deals primarily with the output of research publications as a measure of productivity. It does not cover originality, creativity or other specific factors related to this phenomenon. In checking the validity of its data, however, the Center found approximately the same results would have been obtained had professorial citations been used as a measure of productivity.

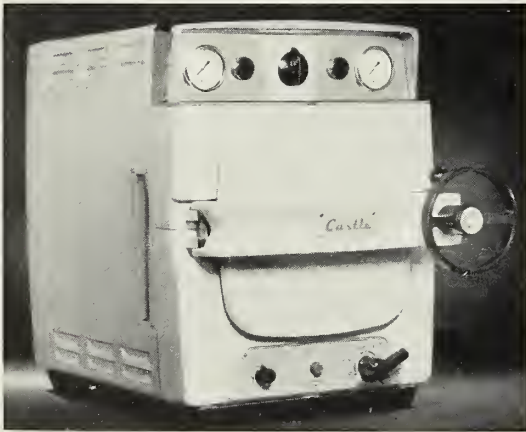
It was found that a low number of publications did not detract from performance ratings, but most of those with high publication output were also regarded as high performers by their colleagues.

* * *

A \$50,000 gift to the surgery department of Wayne State University's College of Medicine has been announced as a major bequest from the estate of a prominent Detroit physician and former instructor at the University of Michigan medical school.

According to the will of Dr. William A. Spitzley, the money is in honor of Dr. Grover C. Penberthy, clinical professor of medicine at Wayne's College of Medicine.

(Continued on Page 792)



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*REFERENCE: J.A.M.A. 163: 359, 1957 (February 2)

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(Continued from Page 790)

since 1913. The bequest was that the money be used for research as determined by chairman of the surgery department, Dr. Charles Johnston.

Dr. Spitzley, who died in March, 1956, was a Detroit pioneer in lung surgery. He co-authored one of the first modern textbooks on surgery.

In his will, Dr. Spitzley requested that a fund should be established and named after Dr. Penberthy. Dr. Spitzley said he wanted to honor Dr. Penberthy and to pay tribute to him and his work "in expression of my lifelong admiration for his professional integrity."

* * *

Wayne State University's Board of Governors recently reviewed gifts and grants totalling \$151,800 at their monthly meeting. Medical and educational research areas received a major portion of \$148,212; student aid gifts, \$4,325 and equipment gifts were estimated at \$1,000. Largest single medical grant of \$25,000 came from the U. S. Public Health Service for training in neurology under direction of Dean Gordon H. Scott.

* * *

Relief for sufferers of hemophilia and potential bleeders may be in sight as the result of work by Walter H. Seegers, M.D., of Wayne State University's College of Medicine. Dr. Seegers has announced the isolation of an anti-hemophilic factor (AHF) in blood which he calls platelet cofactor I.

Speaking before the American Chemical Society, Dr. Seegers recently said that AHF may be absent from the

blood of persons ill with hemophilia or an inhibitor may be present which overcomes the effect of AHF, preventing the blood from clotting. Existence of AHF was theorized by blood researchers almost thirty years ago.

Dr. Seegers adds this scientific achievement to another he made early in his career—the isolation of thrombin.

* * *

John M. Sheldon, M.D., Ann Arbor, was guest speaker at the 89th Annual Session of the Nebraska State Medical Association in Omaha, May 13. The subject was "Office Management of Allergic Problems."

* * *

John R. Rodger, M.D., Bellaire, was winner of one of the 1956 Ross Awards to general practice authors (*GP*, the magazine) for his article "Sleepy Driver as a Preventive Medicine Problem."

The award consisted of a scroll and a \$1,000 honorarium.

Congratulations, Dr. Rodger!

* * *

William A. Hyland, M.D., Grand Rapids (MSM Treasurer and Past President), is one of the Honorary Trustees of the Student AMA Foundation, established in 1955 to give financial aid to growing numbers of medical students in their last three years of training.

Congratulations, Dr. Hyland!

* * *

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ion, and the Association of Medical Directors and coordinators will hold a joint convention at the Con- Hilton Hotel in Chicago, July 7 to 12, 1957. For gram, write Charles Armon, President, AMD&C, 15 W. Highland Avenue, Chicago 31, Illinois.

* * *

John R. Rodger, M.D., Bellaire, advocated before a arch Meeting of the House Traffic Safety Subcom- tee in Washington that a federal agency to set omobile safety standards be formed. Dr. Rodger, representing the Michigan State Medical Society, said t Michigan's experience with such a program indi- es that a national program would save 4,000 lives ear within ten years.

Dr. Rodger is chairman of the MSMS Study Com- tee on Prevention of Highway Accidents.

* * *

Michigan names in the news during the March entific session of the American Academy of General ctice in St. Louis included John E. Webster, M.D., roit neurosurgeon, guest essayist, and Richard A. rington, M.D., from a small community near Milan, higan, winner of a Mead Johnson \$1,000 award to 1956 medical school graduate who plans a career a family doctor.

* * *

Brooker L. Masters, M.D., was honored with a testi- nial dinner given by the Gerber Memorial Hospital Fremont in March, following Dr. Masters' appoint- at as Medical Director of Michigan Hospital Service. Dr. and Mrs. Masters were presented by the Hospital rd with a framed resolution expressing regret at r departure and wishing him well in his new eavor.

The Masters had resided in and served the Fre- nt community for the past ten years.

* * *

William Bromme, M.D., Detroit, discussed the "Fu- of VA Hometown Medical Care Program" at the il 6 Conference on Veterans' Affairs in New York. he meeting was called by the AMA Committee on eral Medical Services and Council on Medical Serv- for the state medical society representatives of seven- Eastern Region states.

imilar regional conferences were held in the Central Western areas of the nation.

* * *

William J. Burns, MSMS Executive Director, was or guest and speaker at Past Presidents' Night of Detroit Commercial Secretaries Association, Statler el, Detroit, April 17. Mr. Burns, who was a mem- of the DCSA during the years 1930 to 1935, was ored as Immediate Past President of the Michigan ociation Executives Forum, composed of some 100 utives of business, professional and technical as- ations in Michigan. Mr. Burns' address on April was entitled "Changing Association Horizons."

* * *

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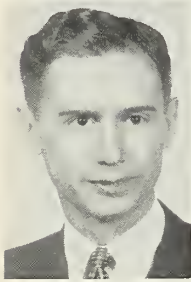
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of the Academy is "to promote the science and art of medicine and the betterment of public health, through an understanding and utilization of the functions and procedures of physical medicine and rehabilitation."

Max K. Newman, M.D., Detroit, is President of the Academy; James W. Rae, M.D., of Ann Arbor, is Vice President; Frederic B. House, M.D., Ann Arbor, is Secretary-Treasurer. Trustees include George K. Koepke, M.D., Ann Arbor; Robert C. Dean, M.D., Detroit; and William C. Schaeffer, M.D., Detroit.

* * *



Brooker L. Masters, M.D., Fremont, was named Medical Director of Michigan Blue Cross and took over the post on March 18.

Wm. S. McNary, executive vice president of MHS, announced the appointment. Dr. Masters replaced Harry Becker, M.D., Battle Creek, who resigned some months ago for reasons of health.

Dr. Masters, a general practitioner in Fremont since 1946, has been active in administrative posts in medicine for several years.

He is vice president and a member of the board of trustees of the Michigan Health Council and has been chairman of the Michigan State Medical Society Committee on Rural Health Service since 1953. He also served as chairman of the Tenth Annual Rural Health Conference held in January of this year.

Dr. Masters, who graduated from the Indiana University School of Medicine in 1942, completed his internship at Sparrow Hospital, Lansing, in 1943.

He entered the U. S. Air Force under the residence training program that same year and was discharged in 1946 as a Flight Surgeon with the rank of Major.

Dr. Masters, who is thirty-nine, is married and the father of four children—Diane, eleven; Jeffrey, eight; Craig, five, and Lorelie, two.

* * *

The least tangible but probably the most potent factor in the existing favorable trend in mortality from tuberculosis is the general improvement in the standard of living. Greater earning power has made possible more adequate nutrition and better housing. Reduction in the average size of families has reduced overcrowding, which in turn has lessened opportunities for the spread of infection. Where economic levels have continued high, tuberculosis rates have fallen; when war or famine has intervened they promptly rise. It is more than coincidence that the levels of tuberculosis throughout the world are closely related to the economic level of the populations concerned.—ALTON S. POPE, M.D. and JOHN E. GORDON, M.D., *Am. J. M. Sci.*, Sept., 1953

* * *

Congratulations, Genesee County Medical Society, on the Trauma Edition of *The Bulletin* of May 2, 1953 (Volume 29, No. 16). Contributors included George J. Curry, M.D., on "Medical Aspects of Traffic Safety"; R. E. Johnson, M.D., on "Effects of Chronic Disease".

(Continued on Page 796)

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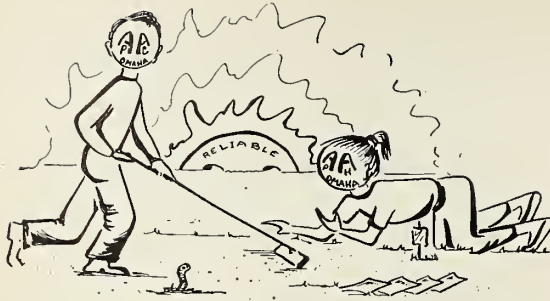
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(Continued from Page 794)

and Certain Drugs"; Walter Z. Rundles, M.D.,
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Branch, M.D., on "Driver Screening of Crippled and
Afflicted Adults"; C. J. Scavarda, M.D., on "Otolaryn-
gology and Traffic Accidents"; R. Gordon Brain, M.D.,
"Psychiatric Aspects of Driver Screening"; Franklin
Wade, M.D., on "Emergency Department Musts" a
"Hospital Stay of the Traffic Casualty"; Sydney
Lyttle, M.D., on "Clinical Evaluation of the Auto Cra-
sh Victim"; Otto J. Preston, M.D., on "Medical-Legal
Aspects"; Harold W. Woughter, M.D., on "Summary
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* * *

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* * *

MSMS President's Itinerary

1956

Sept. 24-25—Annual Meeting of House of Delegates
Detroit

Sept. 26—Board of Directors of MMS

Sept. 26—Radio interview at WKMH

Sept. 27—Address at Wayne University Alumni Banquet

Sept. 28—Council Meeting

Oct. 10—Board of Directors MMS

Oct. 17—Conference at Lansing

Oct. 19—Indiana State Medical Annual Session, In-
dianapolis

Oct. 24—Conference in Lansing

Nov. 6—Michigan Academy of GP's Banquet

Nov. 8—Presiding at morning session of MAGP's

Nov. 28-30—AMA Interim at Seattle, Wash.

Dec. 10—Address before Southfield Kiwanis Club

1957

Jan. 4—Council Meeting

Jan. 11-12—CHA Conference at Whittier Hotel

Jan. 17—Rural Health Conference, Kellogg Center,
East Lansing

Jan. 23-25—Annual Meeting of the Council, Detroit

Jan. 25-26—County Secretaries Meeting, Detroit

Jan. 26—AMA Meeting on Polio, Chicago

Feb. 5—Industrial Health Assoc. Conference

Feb. 6—Board of Directors of MMS

Feb. 10—Appearance on WJBK Television

Feb. 10—Conference in Detroit

Feb. 21—Conference in Lansing—two meetings

Feb. 23—Wayne County Medical Society Preside-
ntial Banquet

Feb. 26—Conference with MHS

Feb. 27—Address before Men's Club Lutheran Church

Mar. 3—Committee on MMS at Lansing

Mar. 4—Address before Economic Club at Vassar
Memorial

Mar. 6—Presiding at Conference on Trauma at La-
nsing (AAGP)

Mar. 9—Appearance on WWJ Television on Polio

Mar. 9—Meeting at Lansing

Mar. 9—Press Conference for MCI

Mar. 12—Executive Committee of The Council Meet-
ing, Detroit

Mar. 13—Board of Directors of MMS

Mar. 13-15—Michigan Clinical Institute

Mar. 29—Address of welcome before Michigan In-
dustrial Conference

April 3—Address at banquet of Restaurateurs

(Continued on Page 798)

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(Continued from Page 796)

Stewards

- April 8—Address of Welcome to Michigan Dental Association
April 10—Committee Meeting at Sheraton Cadillac
April 16—Conference with Legislators on Polio
April 16—Meeting with Ingham County Medical Society
April 17—Executive Committee of the Council, Detroit
April 22—Meeting with Anesthetists of Wayne County
April 22—Wayne County Banquet
April 24—Telecast A.A. Medical Education
April 26—MMS Board meeting
April 27—House of Delegates Emergency Meeting
April 28-30—Meeting with Congressmen, Washington, D. C.
May 7—Wisconsin State Medical Meeting, Madison
May 8-9—President's Committee on Higher Education
May 14—Ohio State Medical Meeting, Columbus
May 15—Executive Committee of The Council, Detroit
May 16—1958 MCI Committee on Arrangements, Detroit

* * *

MEDICAL TELEVISION SHOWS PRODUCED BY MICHIGAN HEALTH COUNCIL

WJBK-TV, Detroit

- April 7—Subject: Child Dental Care—Guests: AL E. Seyler, D.D.S., Detroit; Zallman Konikoff, D.D.S., Royal Oak; Miss Annamaria Noe, Detroit; and Mike Kantner, East Lansing
April 14—Subject: Old Age—(Film—"Proud Year")
April 21—No show scheduled due to Easter
April 28—Subject: Cancer—(Films—"From One Cancer to Another" and "Man Alive")

WKAR-TV, East Lansing

- April 11—Subject: Red Cross Donor Program—Guests: John Scully, Joseph Venier, M.D., William Wilkinson, Mrs. Margaret Sneed, R.N., H. D. Anderson, M.D., all of Lansing.
April 25—Subject: Preface to a Life (Film)

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acknowledgments of all books received will be made in this column, this will be deemed by us as full compensation to those giving them. A selection will be made for review, as expedient.

MANAGEMENT OF EMOTIONAL PROBLEMS IN MEDICAL PRACTICE. Edited by Samuel Liebman, M.D., Medical Director, North Shore Health Resort, Winnetka, Ill.; Clinical Assistant Professor of Psychiatry, University of Illinois College of Medicine, Philadelphia, Montreal: J. B. Lippincott Company, 1956. Price \$5.00.

The lectures are entitled: "Psychiatric Emergencies," "The Use and Abuse of Sedatives and Stimulants," "The Management of the Anxious Patient," "The Depressed Patient," "The Management of Emotional Reactions in the Male Involutional Period," "The Management of the Multiple Complainer," "The Management of Overeating, Overdrinking and Oversmoking," "Avoiding the Production of Iatrogenic Disease," "The Utilization of Community Resources in Medical Practice."

The material in these lectures is presented in a convenient practical arrangement which lends itself to easy reading and provides a source for quick reference for the busy practitioner. Thus the intent of this volume to provide some help to the physician in the management of everyday emotional problems, is clearly successful.

W.D.M.

TITLE FOR THE MIND. By William Sargeant. Garden City, N. Y.: Doubleday & Company, Inc., 1957. Price \$4.50.

This work offers one main thesis: exploit the subject's most fearful point, inflame his emotions to the point of collapse, and strong positive suggesting will reorganize his thought patterns.

The production of "abreaction" through drugs is well outlined. The similarity of method using psychoanalysis to "abreact" is brought out.

This is, indeed, an interesting volume showing how various types of beliefs can be implanted in people after their function has been sufficiently disturbed by accidentally or deliberately induced fear, anger or excitement.

J.C.

THE ROAD TO INNER FREEDOM. The Ethics. By Baruch Spinoza. Edited and with an Introduction by Dagobert D. Runes. New York: Philosophical Library, 1957. Price \$3.00.

The aims of Spinoza are most ideal: how to live with emotions, passions, and God. It may well be with a seemingly newly aroused interest in psychology, religion and mental diseases, that this decade may rediscover Spinoza. The pensive mind will find this an unusual volume for stimulating reflection.

J. C.

ALBERT SCHWEITZER. The Story of His Life. By Jean Pierhal. New York: Philosophical Library, 1957. Price \$3.00.

Men of music and medicine will find this a relaxing review of a dedicated life. It is refreshing evidence that a man trained in traditional backgrounds can retain perspective and achieve success.

J. C.

EXPERIMENTAL PSYCHOLOGY AND OTHER ESSAYS. By I. P. Pavlov. New York: Philosophical Library, 1957. Price \$7.50.

The reading of some of the basic writings of this Nobel prize winner in physiology may well elevate his stature in the mind of the mature physician. His great regard for experimental method, and, particularly in working with a whole normal animal, is as refreshing in our modern era as it was in his. To the vast army of investigative imitators, there are here interned lessons of clarity they have never closely copied.

J. C.

RHEUMATIC DISEASES, Rheumatism and Arthritis. By Heinrich G. Brugsch, M.D., F.A.C.P., Assistant Professor of Medicine, School of Medicine, Tufts University; Physician-in-Charge, Arthritis Clinic of The Boston Dispensary, a Unit of the New England Medical Center; Diplomate, The American Board of Internal Medicine. Montreal and Philadelphia: J. B. Lippincott Company, 1957.

As many as ten million persons suffer from "presumptive" rheumatism and arthritis, and 100 million days are lost from work annually because of it. The field of rheumatology has been the stepchild of medicine because of the complexity of disease processes involving such an array of structures and functions which often make the therapeutic approach disappointing. Brugsch provides a concise introduction to the field from the



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point of view of the internist. Controversial and theoretical aspects of Rheumatic Fever, Rheumatoid Arthritis, Ankylosing Spondylitis, Diffuse Collagen Disease, Degenerative Arthritis, Gout, Infectious Arthritis, and other subjects are covered in a bibliography of over 250 papers from the American literature, and the "essentials" are discussed in a very readable fashion with emphasis placed on conservatism and the long-continued use of simple methods of treatment rather than on the expectation of reversing the disease processes by "miracles." The section on physical medicine could be amplified and that on rehabilitation is cursory. Prophylaxis of rheumatic fever is adequately discussed but not included in the Table of Contents.

Some of the illustrations (p.191) are excellent while others (p.309) leave something to be desired. While the Index refers to pages by generic name of drugs in some instances (Butazolidin- See Phenylbutazone)- (Phenylbutazone- P. 235), the reverse is true in others (Probenecid- See Benemid)- (Benimid- P. 82, 238).

The book contains no startling innovations, but the essentials contained therein could well be applied by any physician treating adults to the majority of his patients.

R.E.F.

THE CARE OF THE EXPECTANT MOTHER. Josephine Barnes. New York: Philosophical Library, 1956. 266 pages.

As the author states in the preface, this book is written as a practical guide for all who undertake the man-

agement of pregnancy. "Much of it is based on routine teaching given to medical students and pupil midwives in lectures, antenatal clinics and antenatal ward rounds. However, the author lives in England, and many of the ideas are compatible with the situation as it exists in that country and not particularly applicable to the United States.

The entire field of normal pregnancy, abnormal pregnancy and diseases complicating pregnancy is covered in one small volume, so, of necessity, the book must be considered only as a guide. It is well written, printed on good quality glossy paper, and the illustrations are adequate. There is a minimum of references to current literature; therefore, it is not a source of reference material.

The book is a guide to the broad field of obstetrics as applied to technicians, midwives, and to some extent nurses. The medical missionary and obstetrical supervisor in outlying districts might find it helpful in teaching. But its value to the average practicing physician is limited, as it contains only basic information.

S.T.




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Dr. Haughey:

congratulations on your publication of Dr. Fox's article, "Narcotic Addiction Among Physicians" in the January issue of *THE JOURNAL*. It helps focus much needed attention upon an extremely serious problem. Drug addiction of any type is a problem that constantly confronts the physician, law enforcement authorities, the addicted person, his family and the community at large. Its cost to society in terms of self-degradation, family disintegration and social disorganization is well known.

The Detroit Department of Health is attempting to attack the various aspects of this problem through the operation of its Narcotics Clinic. The psychiatric and medical consultative services are available to physicians, other professional people, the addicted person and his family, and the community at large. The Clinic functions as a clinical and administrative arm of the Health Department, totally unrelated to any police function. Strict adherence is effected to all concepts of medical ethics.

The question that Dr. Fox raises regarding education of medical students in the relationship of the physician to addicting drugs and addicted persons is a valid one. At Wayne State University College of Medicine we have instituted a minimum of four hours lecture, case presentation and discussion with the junior medical students as part of the curriculum in psychiatry. We agree that this comprises an essential facet of education among physicians.

The Clinic would welcome any requests for consultation from anyone beset with a problem concerning the use or abuse of narcotic drugs. Our office is located at 100 St. Antoine Street (second floor) and the telephone number is Wo. 1-7302, extension 217.

Respectfully,
HERBERT A. RASKIN, M.D.
Medical Director
State Board of Alcoholism

Flint, Michigan
April 24, 1957

Dr. Haughey:

I wish to take this opportunity to thank you in behalf of the Genesee County Medical Society for the very excellent presentation of our annual Cancer Day Program that appeared in several places in the February issue of *THE JOURNAL* of the Michigan State Medical

Society. This particular issue of *THE JOURNAL* has enabled us to have this program well publicized over the state, and I have heard many favorable comments on this presentation every time I have made a trip out of this city since the issue appeared.

If our program this Wednesday is not an outstanding success, it will certainly not be due to any deficit that could reflect on *THE JOURNAL* of the MSMS.

Flint, Michigan
April 15, 1957

Postscript April 20, 1957

The record of attendance for all programs is as follows:

1946	.....215
1947	.....175
1948	.....225
1949	.....238
1950	.....221
1951	.....248
1952	.....264
1953	.....266
1954	.....253
1955	.....292
1956247
1957356

Sincerely yours,
H. B. ELLIOTT, M.D.
Chairman, Cancer Day Committee
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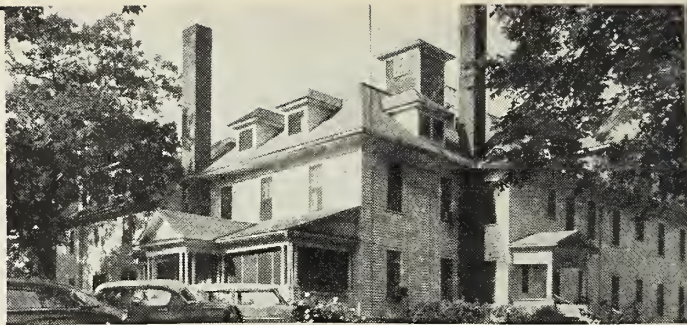
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ALLERGY PRACTICE FOR SALE: Splendid opportunity for some physician who desires to take up allergy as a specialty. Allergist retiring because of illness. Practice for sale in a Michigan city of 175,000. Gross cash income \$50,000 annually. Would remain with purchaser sufficiently long for him to become familiar with the work. Reply Box 3, 606 Townsend Street, Lansing 15, Michigan.

FOR SALE: Cambridge Simpli-Trol Portable Electrocardiograph. Guaranteed to be in excellent condition. Clyde H. Chase, M.D., 8868 Hendrick Drive, Brighton, Michigan. Telephone Academy 7-1082.

THE JOURNAL

of the Michigan State Medical Society

VOLUME 56

JULY, 1957

NUMBER 7

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Meeting of May 15, 1957

- **Referred by the House of Delegates, Special Session April 27, 1957.**—Motion calling for a market opinion survey—plan of this study regarding the people's wants in medical prepayment was presented, discussed and adopted for immediate activation, in order to report to the House of Delegates in Grand Rapids next September.
- **Survey of Michigan's Two Service Corporations.**—This plan, proposed by Michigan Hospital Service, was approved in principle with final approval to be contingent upon submission of the completed outline to be prepared by Dr. McNierney of the University of Michigan School of Business Administration.
- **VA Home Town Medical Care Program.**—The Committee (Wm. Bromme, M.D., Detroit; W. S. Jones, M.D., Menominee, and G. W. Slagle, M.D., Battle Creek) reported on its May 6-7 meetings with VA officials in Washington and presented a resolution for introduction into the AMA House of Delegates June 3, NYC.
- **Michigan-Cornell University Medical School Auto Crash Study.**—A letter to be signed by President Arch Walls, M.D., for mailing to some 900 M.D.'s located in fifteen counties of Michigan in which the Cornell Crash project will be conducted, was approved.
- **President Walls announced he had selected Walter P. Reuther of Detroit as Biddle Lecturer for 1957.**
- **Mayor Paul G. Goebel and Congressman Gerald R. Ford, both of Grand Rapids, are to be invited to present welcome addresses at the opening meeting of the 1957 MSMS House of Delegates Session in Grand Rapids.**
Scientific exhibitors for the 1957 Annual Session were selected.
- **Annual Registration of Doctors of Medicine.**—Report on possible future activity concerning annual registration, as drafted by L. A. Drolett, M.D., Lansing, was referred to the Legislative Committee with request that it draft a resolution for presentation to The Council, and after approval by The Council, for subsequent submission to the MSMS House of Delegates in September.
- **Appointments.**—Max L. Lichter, M.D., Detroit, to represent MSMS at AMA Civil Defense meeting June 1, 1957. E. F. Crippen, M.D., Mancelona, R. W. Pomeroy, M.D., Lansing, and A. Hazen Price, MD., Detroit, as official MSMS representatives to attend Seminar on

"The Chronically Ill," May 26-28. A. Hazen Price, M.D., Detroit, to represent MSMS at HEW Regional Seminar on "Health of the Aged," Chicago June 11-12.

- **Monthly Financial Report** and bills payable were presented and approved.
- **1958 Michigan Clinical Institute.**—The closed color television facilities of Smith, Kline and French Laboratories, Philadelphia, again were offered for use at the March, 1958, MCI—and were accepted with thanks. Ford Hospital, Detroit, was selected as the hospital of origin for the color television program; Brock E. Brush, M.D., Detroit, was appointed Chairman of the Special Committee on Color Television Program.
"Yesterday's Hopeless" was decided as the theme for the 1958 MCI.
- **The Public Relations Council's report** included information on medical bills before the 1957 Michigan Legislature; progress of the PR Library; exhibit at the State and two county fairs; report on Congressional Breakfast in Washington, D. C.; and report on meeting of Michigan Health Officers Association, Grand Rapids, May 2.
- **Councilor Conferences.**—Council Chairman D. Bruce Wiley, M.D., urged all councilors to arrange date, place and hour of their councilor conferences as soon as possible, to eliminate conflicts and to permit MSMS Officers on these programs a less crowded schedule than last year.
- **Committee Reports.**—Meeting with Board of Pharmacy, April 4. Beaumont Memorial meeting in Governor's and Attorney General's offices May 2 and May 8; Michigan Cancer Co-ordinating Committee, May 9; Arbitration Committee, May 10.

HOUSE BILL 586

House Bill 586, dealing with hospital care payments for persons receiving old age assistance and for other categories of dependent persons, passed the Michigan legislature this year.

The bill was written by the Michigan Social Welfare Department to modify existing law so that Michigan could better qualify for funds available from the federal government on a matching basis.

Briefly, the law sets up an irrevocable medical assistance fund which cannot be used for any other purpose. Into this account each month will be paid \$6.00 for each person receiving assistance. This sum will come half from federal funds and half from State funds up to the limit of avail-

(Continued on Page 889)

Infant Allergies

Infants are not born hypersensitive but may develop hypersensitivity to foodstuffs shortly after birth. The earliest sensitizations are likely to be to milk, wheat, eggs and orange juice, with which contact is established early in life. Heredity is usually a dominant factor in the tendency of infants to develop allergy. Infants with a family history of both paternal and maternal allergy tend to develop clinical symptoms earlier than those with unilateral inheritance. Both the allergen and the symptom in the

infant may be different from those of the father or mother.

Allergic disorders of infants include gastrointestinal disturbances, infantile eczema, urticaria and asthma. Gastrointestinal allergy may be manifested by vomiting, colicky abdominal pain and diarrhea. Allergic dermatitis may be evidenced by wheal-like cutaneous reactions which may develop into exudative lesions over the scalp, face and body. A systemic food hypersensitivity may produce an asthmatic response manifested by dyspnea and wheezing, although infection is usually associated with this type of response.

Common treatments include avoidance of the allergen, desensitization, antihistaminics and, in the presence of infection, antibiotics. Infants sensitive to the proteins of cow's milk whey may be fed human, goat or mare's milk reinforced with KARO® Syrup. Casein-sensitive infants may be offered soy-bean milk or amino acid mixtures reinforced with KARO Syrup.

The same problems of infant feeding recur from generation to generation, but solutions may differ with each era. The carbohydrate requirement for all infants is as completely fulfilled by KARO Syrup today as a generation ago. Whatever the type of milk adapted to the individual infant, KARO Syrup may be added confidently because it is a balanced mixture of low molecular weight sugars, readily miscible, well tolerated, palliative, hypo-allergenic, resistant to fermentation in the intestine, easily digestible, readily absorbed and non-laxative. KARO is readily available in all food stores.

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WHOLE GOAT'S MILK FORMULAS

Age Months	Fluid Milk Fluid Oz.	Water Oz.	KARO Tbsp.	Each Feeding Oz.	No. of Feedings in 24 Hrs.	Total Calories
Birth	10	10	2	3	6	320
1	12	13	2½	4	6	390
2	15	13	3	4½	6	480
3	17	9	3	5	5	520
4	20	11	3½	6	5	610
5	23	11	4	6½	5	700
6	26	10	4	7	5	760
7	28	11	3	7½	5	740
8	30	11	2½	8	5	750
10	32	9	2	8	5	760

EVAPORATED GOAT'S MILK FORMULAS

Age Months	Weight Lbs.	Evap. Goat's Milk Oz.	Water Oz.	KARO Tbsp.	Each Feeding Oz.	No. of Feedings in 24 Hrs.	Total Calories
Birth	7	6	12	1	3	6	290
1	8	8	16	2	4	6	395
2	10	9	14	3	4½	5	520
3	12	10	15	3½	5	5	590
4	14	12	18	4	6	5	695
5	16	12	21	4	6½	5	695
6	17	13	22	4	7	5	730
7	18	14	21	3	7	5	710
8	19	15	20	2	7	5	690
10	21	16	16	1	8	4	730

LIQUID SOY MILK FORMULAS

Age Months	Evap. Milk Fluid Oz.	Water Oz.	KARO Tbsp.	Each Feeding Oz.	No. of Feedings in 24 Hrs.	Total Calories
Birth	6	12	2	3	6	380
1	8	16	3	4	6	532
2	9	14	3	4½	5	576
3	10	15	3½	5	4	650
4	12	18	4	6	5	768
5	12	21	4	6½	5	768
6	13	22	4	7	5	768
7	14	21	3	7	5	796
8	15	20	2	7	5	780
10	16	16	1	8	4	764

DRIED SOY MILK FORMULAS

Age Months	Dry Milk	Water Oz.	KARO Tbsp.	Each Feeding Oz.	No. of Feedings in 24 Hrs.	Total Calories
Birth	6	20	2	3	7	360
1	8	22	2	4	6	440
2	9	24	2½	4	6	510
3	10	29	3	6	5	580
4	12	33	3½	7	5	690
5	13	33	3½	7	5	730
6	14	33	3½	7	5	740
7	14	33	2½	7	5	710
8	15	33	2	7	5	720
10	15	33	2	8	4	720



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American Medical Association

Special Report

The 106th annual meeting of the American Medical Association was held in New York City, June 3-7, 1957. For many years, this has been the occasion of many other meetings of national import, some of which have a very distinct bearing on the well-being of the whole medical profession. There were many groups of medical specialists, medical research workers and kindred groups, such as medical fraternities, alumni of many schools, and former students of renowned teachers.

National Medical Civil Defense

The fifth annual conference on Civil Defense was held Saturday, June 1, 1957, in the Serf room of the Waldorf-Astoria, New York. A very careful program had been prepared with the theme, "The ultimate responsibility for the health and medical care of the nation's population, in peace or war, rests on the medical and allied professional groups and they can discharge their responsibilities wisely only if they are adequately informed and equipped."

David B. Allman, M.D., president-elect of the AMA, welcomed the conference. Meetings were scheduled from 9:00 a.m. The importance and grave import of the program was stressed; also, the apparent lack of enthusiasm by the general public and by some professional people. The Council on National Defense sponsored the program, the value of which can best be illustrated by listing the participants:

- DAVID B. ALLMAN, M.D., President-Elect, American Medical Association, Atlantic City, New Jersey
CYRIL COMAR, Ph.D., Chief, Biomedical Research, Oak Ridge Institute for Nuclear Studies, Oak Ridge, Tennessee
JAMES P. COONEY, Major General, MC, USA, Deputy Surgeon General, Department of the Army, Washington, D. C.
ROBERT L. CORSBIE, Division of Biology and Medicine, Atomic Energy Commission, Washington, D. C.
EUGENE P. CRONKITE, M.D., Head, Division of Experimental Pathology, Medical Department, Brookhaven National Laboratory, Upton, Long Island, New York
CORTEZ F. ENLOE, JR., M.D., Member, Committee on Civil Defense, Council on National Defense, American Medical Association, New York, New York
JACK C. GREENE, Director, Radiological Defense Division, Health Office, Federal Civil Defense Administration, Battle Creek, Michigan
HONORABLE CHET HOLIFIELD, U. S. Congressman, 19th District of California, Chairman, Subcommittee on Military Operations, Committee on Government Operations, Washington, D. C.
JOSEPH W. HOWLAND, M.D., Chief, Medical Division, Atomic Energy Commission Project, University of Rochester, Rochester, New York
CARROLL P. HUNGATE, M.D., Member, Committee on Civil Defense and Council on National Defense, American Medical Association, Kansas City, Missouri

FRED OLESON, Radiological Defense Officer, Region 1, Federal Civil Defense Administration, Harvard, Massachusetts

FRANCIS B. STEWART, Colonel USAR, Consultant, Chemical and Biological Warfare Defense, Health Office, Federal Civil Defense Administration, Battle Creek, Michigan

BENJAMIN C. TAYLOR, Director, Engineering Office, Federal Civil Defense Administration, Battle Creek, Michigan

M. M. VAN SANDT, M.D., Director, Medical Care Division, Health Office, Federal Civil Defense Administration, Battle Creek, Michigan

Council on Medical Service

The Council on Medical Service of the AMA and the Blue Shield Commission spent several days in conference of many of the important problems of the voluntary prepaid medical program of the nation. Many and new questions must be solved. New economic conditions are developing which have direct bearing on the problem of care for the veteran, not only for service-connected disabilities, but for any number of other conditions. Reports were made that the Veterans Administration is now making an effort to review the oath of "need" signed by entrants into their hospitals by many who actually have industrial and occupational conditions for which they have entered the VA hospitals. If found out in time, these persons are given a citation and are sent to civilian hospitals, especially when they are eligible for workman's compensation care. The officials reported the Administration is currently collecting about 20 per cent of this insurance. Blue Shield is not now involved in this problem, for there is a provision exempting responsibility for care in government hospitals.

The problems of Medicare are still in a state of flux. The program has not yet been completely worked out. Conditions are different in different states, probably no two state contracts with the Military being the same. So far, there is still dispute as to payments for different services. The Government is still planning on resurveying the contracts, and the renewal dates are being distributed over several months.

In the meantime, most of these dependents are being cared for willingly by most of the doctors. Two state medical societies have refused to sign the covering contracts on certain technicalities, the most important being their unwillingness to set any fee guarantees. Commercial companies are supervising the work, and the patients are being attended.

(Continued on Page 822)

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in Arthritis, Asthma, Allergic Dermatoses

with **lower corticoid dosage**

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prednisolone and hydroxyzine

provides the emotional tranquilizer, ATARAX® (hydroxyzine) and the preferred corticoid, STERANE® (prednisolone) • control of emotional factors by tranquilization enhances response to the corticoid for greater clinical improvement • often permits substantial reductions in corticoid dosage, accompanied by reduction of hormonal side effects • confirmed by marked success in 95% of 1095 cases of varied corticoid indications¹

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5 mg. prednisolone, 10 mg. hydroxyzine hydrochloride, in green, scored tablets. Bottles of 30 and 100.

and now available as **NEW**

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2.5 mg. prednisolone, 10 mg. hydroxyzine hydrochloride, in blue, scored tablets. Bottles of 30 and 100.

and **NEW**

Ataraxoid 1.0

1.0 mg. prednisolone, 10 mg. hydroxyzine hydrochloride, in orchid, scored tablets. Bottles of 100.

advantages: (1) greater flexibility of dosage
(2) effective tranquilization permits lower corticoid dosage

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NOW written **Ataraxoid 5.0**

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Pfizer

(Continued from Page 820)

Conference of Presidents

The Conference of Presidents and Other Officers of State Medical Associations was held on Sunday, June 2, 1957, at the Waldorf-Astoria, New York, with an attendance of several hundred. This was the thirteenth annual meeting. Many of our members in Michigan will remember the beginning of this group. Andrew S. Brunk, M.D., of Detroit, then president of the Michigan State Medical Society, invited a group of presidents and other administrative officers of the state medical societies in the eastern part of the United States to a conference in Detroit to discuss some very important problems facing the profession: the socializing influence from Washington and efforts to solve prepayment, and demonstrate the possibilities of the independent medical profession.

Many very important meetings have been held, and now the group has increased in stature and influence. The program of June 2 consisted of the speech of the newly installed president, reports, election of officers, and three important talks.

Congressman Oren Harris, Arkansas, chairman of the House Foreign and Interstate Commerce Committee, talked about "The Third Party in Medicine." He told how it happens that most medical legislation goes to his committee, and described the efforts of pressure groups, including the government, to encroach on the field of medicine. The very number of bills introduced each year, in which the medical profession by choice or force is involved, points to the gradual loss of much of our work—it being taken over by the Government, or some of its branches. He listed a number of encroachments and gave us the same advice we have had so many times before—quit being always put in the position of being opposed to legislation. He cautioned the profession to consult with its leaders and advisors, and advised us to write some legislation ourselves, propose it, and demand its passage. The profession can take the lead and be its own third party.

Charles B. Shuman, Chicago, president of the American Farm Bureau Federation, talked on "Agriculture Looks to the Future." He cautioned about the danger of creeping socialism. "This is a condition where the government does things for people." It has more or less always existed and has gone under many names such as Fascism, Socialism, and Communism. Once it starts, it must be controlled or it will continue to grow until in the end it encompasses all services. The farmers are in the trap. Certain basic crops upon which they must rely to make a living are in the control of government. A farmer cannot plant more acreage in these crops than he has done before. He has to get permission to change to another crop pattern. Of necessity, he has had to improve his methods and produce more on the

same acres. This has been done, but it has resulted in enormous surpluses. Some of our excess crops are being sold in foreign exchange, and many of them subsidized so that our neighbor's crops cannot be sold in the same market. That is not called socialism, but it actually is socialism following true to form. It is constantly increasing. This must be a warning to the medical profession. We have some of it, too.

Oswald D. Heck, Schnectady, New York, speaker of the New York Assembly, talked on "The Doctor and the Legislator." He repeated much that Congressman Harris had said, but in a different application. He stated that we have the opportunity to propose beneficial legislation and to insist on its being the basis of new laws. Members of the profession know better than anyone the needs in many fields. If we do not propose the new laws in the things about which we are most concerned, someone who has an ulterior motive will write the new laws for us. Once the bill has been written and introduced and we do not like it, we must assume the attitude of opposition, a very unnecessary and unfortunate situation. We should propose instead of oppose.

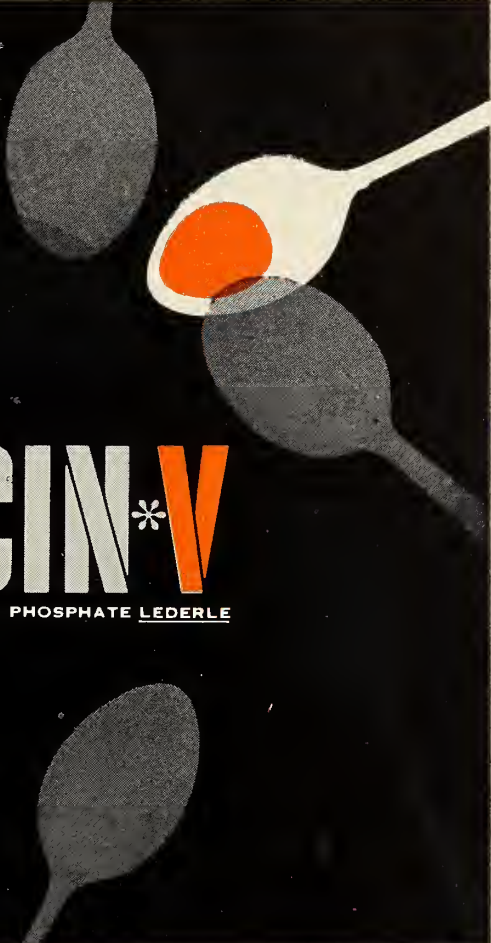
Actions of the House of Delegates

Revision of the Principles of Medical Ethics, relations with the United Mine Workers of America Welfare and Retirement Fund, the federal government's Medicare program, new standards for medical schools, a new statement on occupational health programs and the issue of Social Security benefits for physicians were among the wide variety of subjects acted upon by the House of Delegates.

Dr. Gunnar Gundersen of La Crosse, Wisconsin, member of the AMA Board of Trustees since 1948 and chairman for the past two years, was unanimously chosen president-elect for the year ahead. Dr. Gundersen, who also was first chairman of the Joint Commission on Accreditation of Hospitals from 1951 to 1953, will become president of the American Medical Association at the June, 1958, meeting in San Francisco. There he will succeed Dr. David B. Allman of Atlantic City, N. J., who became the 111th president at the Tuesday night inaugural ceremony in the Grand Ballroom of the Waldorf-Astoria Hotel.

The House of Delegates voted the 1957 Distinguished Service Award of the American Medical Association to Dr. Tom Douglas Spies, head of the department of nutrition and metabolism at Northwestern University Medical School, Chicago, and director of the nutrition clinic at Hillman Hospital, Birmingham, Ala., for his outstanding contributions to the science of human nutrition. For only the third time in AMA history, the House also voted a special citation to a layman for outstanding service in advancing the ideals of

(Continued on Page 824)



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Youngsters really go for the taste-true orange flavor of ACHROMYCIN V SYRUP. But this new syrup offers more than "lip-service" to your junior patients. It provides the new benefits of RAPID-ACTING, phosphate-buffered ACHROMYCIN V—

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ACHROMYCIN V SYRUP: aqueous, ready-to-use, freely miscible. 125 mg. tetracycline per 5 cc. teaspoonful phosphate-buffered.

DOSAGE: 6-7 mg. per lb. of body weight per day.

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JULY, 1957

Say you saw it in the Journal of the Michigan State Medical Society

(Continued from Page 822)

medicine and contributing to the public welfare. Recipient of this award was Henry Viscardi, Jr., of West Hempstead, New York, founder and president of Abilities, Inc., which employs only severely disabled persons.

Physician registration at the New York meeting had already reached an all-time high at 5 p.m., Thursday, with 18,982 counted and scores of registration cards still unprocessed. The previous high was chalked up at the 1953 New York meeting when the five-day total was 17,958 physicians.

New Principles of Medical Ethics.—The House approved the long-discussed revision of the Principles of Medical Ethics, originally submitted at the 1956 annual meeting in Chicago. The final version, presented by the Council on Constitution and Bylaws and then amended by reference committee and House discussions in New York, now reads as follows:

PREAMBLE

These principles are intended to aid physicians individually and collectively in maintaining a high level of ethical conduct. They are not laws but standards by which a physician may determine the propriety of his conduct in his relationship with patients, with colleagues, with members of allied professions, and with the public.

Section 1.—The principal objective of the medical profession is to render service to humanity with full respect for the dignity of man. Physicians should merit the confidence of patients entrusted to their care, rendering to each a full measure of service and devotion.

Section 2.—Physicians should strive continually to improve medical knowledge and skill, and should make available to their patients and colleagues the benefits of their professional attainments.

Section 3.—A physician should practice a method of healing founded on a scientific basis; and he should not voluntarily associate professionally with anyone who violates this principle.

Section 4.—The medical profession should safeguard the public and itself against physicians deficient in moral character or professional competence. Physicians should observe all laws, uphold the dignity and honor of the profession and accept its self-imposed disciplines. They should expose, without hesitation, illegal or unethical conduct of fellow members of the profession.

Section 5.—A physician may choose whom he will serve. In an emergency, however, he should render service to the best of his ability. Having undertaken the care of a patient, he may not neglect him; and unless he has been discharged he may discontinue his services only after giving adequate notice. He should not solicit patients.

Section 6.—A physician should not dispose of his services under terms or conditions which tend to interfere with or impair the free and complete exercise of his medical judgment and skill or tend to cause a deterioration of the quality of medical care.

Section 7.—In the practice of medicine a physician should limit the source of his professional income to medical services actually rendered by him, or under his supervision, to his patients. His fees should be commensurate with the services rendered and the patient's ability to pay. He should neither pay nor receive a commission for referral of patients. Drugs, remedies or

appliances may be dispensed or supplied by the physician provided it is in the best interests of the patient.

Section 8.—A physician should seek consultation upon request; in doubtful or difficult cases; or whenever it appears that the quality of medical service may be enhanced thereby.

Section 9.—A physician may not reveal the confidences entrusted to him in the course of medical attendance or the deficiencies he may observe in the character of patients, unless he is required to do so by law or unless it becomes necessary in order to protect the welfare of the individual or of the community.

Section 10.—The honored ideals of the medical profession imply that the responsibilities of the physician extend not only to the individual, but also to society where these responsibilities deserve his interest and participation in activities which have the purpose of improving both the health and the well-being of the individual and the community.

In approving the new Principles of Medical Ethics, the House of Delegates also reaffirmed the "Guides for Conduct for Physicians in Relationships with Institutions," adopted in 1951, and requested the Board of Trustees to devise and initiate a campaign to educate both physicians and the general public to the dangers inherent in the illegal corporate practice of medicine in its various forms.

Guides for Relations with UMWA Fund.—In a key action on the basic issue of third-party intervention, as it affects the patient's free choice of physician and the physician's method of remuneration, the House adopted the "Suggested Guides to Relationships Between State and County Medical Societies and the United Mine Workers of America Welfare and Retirement Fund," which were submitted by the AMA Committee on Medical Care for Industrial Workers. In approving the guides, the House also recommended that the Board of Trustees study the feasibility and possibility of setting up similar guides for relations with other third-party groups such as management and labor union plans.

The statement, which outlines both medical society and UMWA responsibilities, contains these "General Guides":

1. All persons, including the beneficiaries of a third-party medical program such as the UMWA Fund, should have available to them good medical care and should be free to select their own physicians from among those willing and able to render such service.

2. Free choice of physician and hospital by the patient should be preserved:

- (a) Every physician duly licensed by the state to practice medicine and surgery should be assumed at the outset to be competent in the field in which he claims to be, unless considered otherwise by his peers.

- (b) A physician should accept only such terms or conditions for dispensing his services as will insure his free and complete exercise of independent medical judgment and skill, insure the quality of medical care, and avoid the exploitation of his services for financial profit.

- (c) The medical profession does not concede to a third party such as the UMWA Welfare and Re-

(Continued on Page 826)

in Hay Fever or Asthma . . .

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...easily, pleasantly and economically

SPECIFIC DESENSITIZATION

easily accomplished quickly and accurately by any physician. First, skin test each patient by the simple scratch test method and determine what allergens the patient reacts. Barry has a Small Pollen Pak for Hay Fever and seasonal asthma cases. Cost \$1.50 for 21 tests of tree, grass and weed pollens, fungi, house dust—individual selection to meet your botanical requirements. Simple, safe, time proven technique with complete directions for your nurse. Ready to report forms included. Send for yours today.

FREE SCRATCH TEST SET

with each Rx Specific Desensitization Set prepared according to your patient's own skin test reactions.

PERENNIAL RESULTS

are obtained by desensitization against those specific irritants to which your patients reacted by the scratch test. Record your reactions on the convenient report card enclosed in each test set. Each desensitization formula is individually prepared for each patient according to his own needs and thereby renders the best specific results of any medication possible. Each treatment 3-vial set (20 doses) is ready mixed and diluted with individually planned treatment schedule. If you already have skin tested your patient, send your reactions to the Allergy Division, Barry Laboratories, Inc. Complete service \$12.50. Prompt 7-10 day service for Rx's.

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(Continued from Page 824)

tirement Fund in a medical care program the prerogative of passing judgment on the treatment rendered by physicians, including the necessity of hospitalization, length of stay, and the like.

3. A fee-for-service method of payment for physicians should be maintained except under unusual circumstances. These unusual circumstances shall be determined to exist only after a conference of the liaison committee and representatives of the Fund.

4. The qualifications of physicians to be on the hospital staff and membership on the hospital staffs is to be determined solely by local hospital staffs and by local governing boards of hospitals."

The Medicare Program.—The House considered three resolutions dealing with the federal government's Medicare program for the dependents of servicemen. The delegates adopted one resolution condemning any payments under the Medicare program "to or on behalf of any resident, fellow, intern or other house officer in similar status who is participating in a training program." Government sanction of such payments, the House declared, would give impetus to the improper corporate practice of medicine by hospitals or other nonmedical bodies. Such proposals, the House added, would violate traditional patterns of American medical practices, seriously aggravate problems of hospital-physician relationships, encourage charges by hospitals for residents' services to patients not under the Medicare program, and create a variety of additional problems in such areas as medical licensure and health insurance.

In another action on Medicare, the House recommended that the decision on type of contract and whether or not a fee schedule is included in future contract negotiations should be left to individual state determination. In this connection, however, the House restated the AMA contention that: the Dependent Medical Care Act as enacted by Congress does not require fixed fee schedules; the establishment of such schedules would be more expensive than permitting physicians to charge their normal fees, and fixed fee schedules would ultimately disrupt the economics of medical practice.

The House also suggested that the AMA attempt to have existing Medicare regulations amended to incorporate the Association's policy that the practice of anesthesiology, pathology, radiology and physical medicine constitute the practice of medicine, and that fees for services by physicians in these specialties should be paid to the physician rendering the services.

New Statement on Medical Schools.—To replace the "Essentials of an Acceptable Medical School," initially approved by the House of Delegates in 1910 and most recently revised in 1951, the House adopted a new statement entitled "Functions and Structure of a Modern Medical School." Presentation of the document followed a

year of careful study by the Council on Medical Education and Hospitals in collaboration with the Association of American Medical Colleges.

The statement is intended to provide flexible guides which will "assist in attaining medical education of ever higher standards" and "serve as general but not specific criteria in the medical school accreditation program." The document encourages soundly conceived experimentation in medical education, and it discourages excessive concern with standardization.

"No rigid curriculum can be prescribed for accomplishing the objectives of medical education," it states. "On the contrary, it is the responsibility of the faculty of each school continually to re-evaluate its curriculum and to provide in accordance with its own particular setting and in recognition of advances in science a sound and well-integrated educational program."

Occupational Health Programs.—The House also approved a new statement on the "Scope, Objectives and Functions of Occupational Health Programs," submitted through the Board of Trustees by the Council on Industrial Health. The Board report to the House said: "The statement describes and defines orthodox in-plant medical programs as understood in this country today and distinguishes clearly between such programs and the various plans for comprehensive medical care of the sick. It should help to resolve misunderstandings concerning the specialty of occupational medicine."

In adopting the statement, the House agreed with a reference committee report which declared that "the House has before it a statement which for the first time clearly defines the scope, objectives and functions of occupational health programs. It marks the needs and boundaries of occupational medicine. It states in a positive fashion the proper place of occupational health programs in the practice of medicine and it clearly charts the pathways of communication between physicians in occupational health programs and physicians in the private practice of medicine."

Social Security for Doctors.—Two resolutions favoring compulsory inclusion of physicians in the federal Social Security system and another one calling for a nationwide referendum of AMA members on the issue were rejected by the House. The delegates reaffirmed their opposition to compulsory coverage of physicians under the Old Age and Survivors Insurance provisions of the Social Security Act. They also recommended a strongly stepped-up informational program of education which will reach every member of the Association, explaining the reasons underlying the position of the House of Delegates on this issue. The House at the same time reaffirmed its support of the Jenkins-Keogh Bills.

(Continued on Page 828)

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... because least dosage adjustment is necessary ...
because the incidence of depression is less ... because up to 80% of patients with mild labile hypertension and many with more severe forms respond to Rauwiloid alone.

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... because Rauwiloid's *nonsoporific* sedative action relieves anxiety in a long list of unrelated diseases not necessarily associated with hypertension ... without masking of symptoms ... without impairing intellectual or psychomotor efficiency.

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After full effect one tablet suffices.

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Rauwiloid is recognized as basal medication in all grades and types of hypertension. In combination with more potent agents it proves synergistic or potentiating, making smaller dosage effective and freer from side actions.

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In moderate to severe hypertension this single-tablet combination permits long-term therapy with dependably stable response. Each tablet contains 1 mg. Rauwiloid and 3 mg. Veriloid. Initial dose, 1 tablet t.i.d., p.c.

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Hexamethonium

In severe, otherwise intractable hypertension this single-tablet combination provides smoother, less erratic response to hexamethonium. Each tablet contains 1 mg. Rauwiloid and 250 mg. hexamethonium chloride dihydrate. Initial dose, $\frac{1}{2}$ tablet q.i.d.

Riker LOS ANGELES

(Continued from Page 826)

Miscellaneous Actions.—In considering 66 resolutions and many additional reports from the Board of Trustees, councils and committees, the House also:

Congratulated the Board and the Committee on *Poliomylitis* for their prompt action in stimulating national interest in the polio immunization program;

Recommended further study and a progressive program of action, probably including legislative changes, to solve the problem of *narcotic addiction*;

Urged a more careful screening of television and radio patent medicine *advertisements*;

Directed the Board of Trustees to investigate the indiscriminate use of stimulants such as *amphetamine*, particularly in relation to athletic programs;

Directed the Speaker to appoint a committee of five House members to study the *Heller Report*, a management survey of the Association's organizational mechanisms;

Commended the Law Department for its special report on *professional liability* and urged state and county medical societies to establish claims prevention programs and to show the new film, "The Doctor Defendant";

Opposed the establishment of any further *veterans'* facilities for the care of non-service-connected illnesses of veterans;

Condemned the compulsory assessment of medical men and staff members by hospitals in *fund-raising campaigns*;

Commended the television program, "*Dr. Hudson's Secret Journal*," its producers and its star, Mr. John Howard, for an outstanding contribution to the public interest and welfare, and

Recommended payment of transportation expenses of *Section Secretaries* for AMA meetings which they are required to attend.

Opening Session.—At the Monday opening session Dr. Dwight Murray, retiring AMA president, stressed the triple theme of the personal touch in medicine, the necessity for freedom in medical practice and the need for professional unity. Dr. Allman, then president-elect, warned against the dangers of third-part contractual agreements involving fixed fee schedules. The Goldberger Award in nutrition research was presented to Dr. Paul Gyorgy of Philadelphia. An AMA citation was awarded to the Parke-Davis & Company for its continuing series of institutional advertisements telling the story of medicine and medical progress. Dr. H. G. Weiskotten, who retired after many years as chairman of the Council on Medical Education and Hospitals, received two bound volumes of letters of appreciation and also an ovation from the House of Delegates.

Inaugural Ceremony.—Dr. Allman, in his Tuesday night inaugural address, declared that the physician is constantly striving for a balance between personal, human values, scientific realities and the inevitabilities of God's will. The inaugural ceremony, which was telecast over Station WABD-TV in New York, included presentation of the Distinguished Service Award to Dr. Spies and the special layman's citation to Mr. Viscardi. Also taking part in the program was the United States Army Chorus of Washington, D. C.

Election of Officers.—In addition to Dr. Gundersen, the new president-elect, the following officers were selected by the House on Thursday:

Dr. Jesse Hamer of Phoenix, Arizona, vice president; Dr. George F. Lull of Chicago, secretary; Dr. J. J. Moore of Chicago, treasurer; Dr. E. Vincent Askey of Los Angeles, speaker, and Dr. Louis Orr of Orlando, Florida, vice speaker.

Four new members were elected to the Board of Trustees: Dr. George Fister of Ogden, Utah, to succeed Dr. James R. Reuling; Dr. Cleon Nafe of Indianapolis, Indiana, to succeed Dr. James R. McVay; Dr. James Z. Appel of Lancaster, Pennsylvania, to replace the late Dr. Thomas P. Murdock, and Dr. Raymond McKeown of Coos Bay, Oregon, to replace Dr. Gundersen. Dr. Edwin S. Hamilton of Kankakee, Illinois, was elected chairman of the Board at its organizational meeting after the elections in the House.

Dr. Homer L. Pearson, Jr., of Coral Gables, Fla., was renamed to the Judicial Council. Two new members were elected to the Council on Medical Education and Hospitals: Dr. Clark Wescoe of Lawrence, Kansas, to succeed Dr. Weiskotten, and Dr. Warde B. Allan of Baltimore, Md., to succeed Dr. F. D. Murphy of Lawrence, Kansas.

For the Council on Medical Service, Dr. Robert L. Novy of Detroit, Michigan, was re-elected, and Dr. Hoyt Woolley of Idaho Falls, Idaho, was chosen to replace Dr. McKeown. Dr. Warren W. Furey of Chicago was re-elected to the Council on Constitution and Bylaws.

At the Wednesday session of the House the Illinois State Medical Society made a record state society contribution to the American Medical Education Foundation by turning over \$170,450 to Dr. Louis H. Bauer of New York, foundation president.

VETERANS ADMINISTRATION

The Veterans Administration anticipates an average daily case load during 1957 of 142,000 patients. The administrator, Harvey Higley, reported they are practically at the peak of expected medical spending. This year they ask \$831,000,000.

NEW SIGNEMYCIN^{*}V

advance in potentiated multi-spectrum therapy—
higher, faster levels of antibiotic activity

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*Signemycin V—the new name
for multi-spectrum Sigmamycin
—now buffered for higher
antibiotic serum levels.*

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—particularly for that 90% of the patient
population treated at home or office where
susceptibility testing may not be practical.*

Signemycin V Capsules provide the unsurpassed antimicrobial spectrum of tetracycline extended and potentiated to include even those strains of staphylococci and certain other pathogens resistant to other antibiotics. The addition of the buffering agent affords higher, faster antibiotic blood levels following oral administration.

Supplied: Capsules containing 250 mg. (oleandomycin 83 mg., tetracycline 167 mg.), phosphate buffered. Bottles of 16 and 100.

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AMA Washington Letter

THE MONTH IN WASHINGTON

The 85th Congress is in the final few weeks of its first session with prospects that it will enact few major medical bills this year, but that next year will be a different story. On at least half a dozen important measures action has been postponed, with the understanding that the issues will be fought out in 1958.

Circumstances prevented any delay on one bill that is of considerable importance to the younger doctors—a new version of the doctor draft act. It had to be enacted by July 1, the Defense Department insisted, or not enough doctors would be available to maintain the military medical services at an acceptable level.

The problem is that the Armed Forces require a higher ratio of physicians to troops than exists between physicians and the general population. Without some special law, the services would either have to make out with fewer doctors than they say they need, or draft thousands of non-physicians merely to obtain the doctors who are in the particular age groups.

This scheme was devised: Amendment of the regular draft act to allow the call up, to age 35, of the necessary numbers of doctors from among those who had received educational deferments; they could be called because they are physicians, not because they are of a certain age. Also, the national, state and local Medical Advisory Committees of Selective Service would be continued, as would a number of provisions in the original act that protect the rights of drafted doctors.

As Congress moved toward adjournment, prospects also were that it would enact a bill to help out some states caught in a financial squeeze because of a new act, passed last year but not scheduled to go into effect until July 1, 1957, to increase federal payments for the medical care of persons on the state-federal public assistance rolls.

Under the old system, states could use the U. S. dollars to pay directly to the individuals for their medical care, or directly to the vendors of medical service—hospitals, physicians, dentists. Many states, adopting the second plan in all or part of their counties, used the federal money to help maintain pooled funds, which support various medical care programs.

All U. S. money paid out under the new act must be used in the form of vendor payments—that is, not turned over directly to the public assistance cases. At the same time, the law as originally passed stipulated that any money received under the old plan henceforth would have to be handled as “recipient payments,” that is

going directly to the persons on public assistance rolls.

A number of states thus faced the prospects of drastically revising their carefully-established medical care programs or sacrificing large amounts of federal money. Congress came to their rescue by means of a bill that would allow them to use the old money as before, yet take full advantage of the new federal program.

In the closing weeks of the session, however, two major medical bills were making little, if any progress—those for federal grants to medical colleges to build teaching facilities and for initiating a program of health insurance for federal civilian employees.

A number of bills had been introduced on aid to medical education, representing virtually all the viewpoints in Congress and the administration, but nothing much was happening. Here one factor was the economy drive, which was not too successful in cutting the administration's health budget, yet which virtually precluded any new programs involving large appropriations.

On federal employee health insurance, these longstanding differences of opinion still blocked any compromise: Should emphasis be on basic health insurance, or on major medical (catastrophic) coverage? Should U. S. payroll deductions be permitted, or would this open the door to demands for many other payroll deductions, such as for union dues? What safeguards could be set up to prevent either the commercial insurance companies or the nonprofit organizations (union plans and Blue Cross-Blue Shield) from gaining a dominant position?

On these two major bills—as well as on many others, sponsors were not too discouraged. Already they were making plans to press them still more vigorously next year when Congress, looking toward the fall elections, may be more responsive.

Notes

Doctors are asked by PHS to be on the alert for a new type A influenza strain expected to work its way into this country from the Far East. Details from state health departments.

* * *

National Library of Medicine officials were still hopeful, as the end of the session neared, that Congress would vote enough money to start constructing the library's new building next year.

* * *

For the first time the U. S. contribution to
(Continued on Page 835)

*optimal dosages for ATARAX,
based on thousands of case histories:*

25 mg. (t.i.d.)

*for these **25** adult indications:*

TENSION	SENILE ANXIETY	MENOPAUSAL SYNDROME	ANXIETY	PREMENSTRUAL TENSION
PHOBIA	HYPOCHONDRIASIS	TICS	FUNCTIONAL G. I. DISORDERS	PRE-OPERATIVE ANXIETY
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(BRAND OF HYDROXYZINE) Tablets-Syrup

10 mg. (t.i.d.)

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ANXIETY	TICS	HOSTILITY	NIGHTMARES	HYPEREMOTIVITY	RESTLESSNESS
TEMPER TANTRUMS	HOSPITAL FEAR	• AND ADJUNCTIVELY IN ASTHMA		ENURESIS	

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- 9 of every 10 patients get release from tension, without mental fogging
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- flexible medication, with tablet and syrup form

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In tiny 10 mg. (orange) and 25 mg. (green) tablets, bottles of 100.

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Prescription only.



CHICAGO 11, ILLINOIS

Editorial Opinion

WALTER REUTHER'S PLANS FOR MEDICINE

United Auto Workers, a powerful and influential union, finds present conduct of the practice of medicine not to its liking. This is not a new dissatisfaction. Criticism of medical practice was used as the basis for UAW support of governmental control when Mr. Harry Becker was welfare director of the union and its very effective mouthpiece. The same attitude has prevailed ever since as the union has continued to seek legislation for a program of national compulsory health insurance. Now, since the Congress has not enacted the legislation it wanted, the union has intensified its criticisms, using alleged failure of the medical profession as justification for development of plans of its own.

Plans of the union to enter the field of medical practice would find little support unless all existing plans were first shown to be inadequate, incapable or unwilling to give proper medical care. This appears to have been the effect sought by Mr. James Brindle, Director, Social Security Department of United Auto Workers, when he addressed a section of the American Public Health Association at Atlantic City, New Jersey, November 13, 1956. He reported plans of the union but first denounced all present systems of prepayment. He did not conceal the fact that the union is transferring its interest from the method of payment to actual conduct of the practice of medicine.

Mr. Brindle says that UAW members find existing plans unsatisfactory because premiums rise constantly, because they are usually left with substantial bills for services they thought covered, because there has been little sound development in extending areas of coverage and because existing plans have demonstrated no concern and accepted no responsibility for the quality of medical care.

He objects to indemnity plans because they do not pay enough of the bill but condemns full service plans for not providing incentives to efficiency and economy. He rebukes present plans for failure to exercise controls but disparages co-insurance and deductible features. He reiterates his displeasure at continually rising premium costs but insists that benefits must include prevention, diagnosis and rehabilitation. He calls for removal of the economic barrier to needed medical care but wants no artificial encouragement of unnecessary surgery and hospitalization.

Mr. Brindle believes that all of medicine's present faults will be corrected when doctors work in clinic groups, on salary. He said, "We reject the

fee-for-service method because it introduces financial incentives which often conflict with medical considerations. * * * There are arrangements for reimbursement now in use which relieve the doctor from preoccupation with business and fiscal functions and allow him to devote his entire resources to rendering high grade medical care."

Aspirations of the union were revealed quite clearly by Mr. Brindle in a few brief but significant remarks, made at intervals in his address. He said, "We now realize that in order to obtain care of high quality at reasonable cost, we must address ourselves to medical care itself—its organization and quality—and not just to the methods of financing such care. * * * Today the UAW is spearheading a move to make (plans like HIP of New York and the Kaiser plan) available in Detroit. The President of our Union recently called together a group of interested community leaders to set up a comprehensive prepaid medical care program based on group practice by salaried physicians in community hospitals, open to everyone in the community—not just our members."

It is suggested that the above paragraph be read more than once. Considering the thoroughly demonstrated ambitions of UAW leadership this can only be taken as the opening gambit by a player who never moves without planning his future position and never plays without expecting to win. Those who think Mr. Reuther intends to confine his interests in the practice of medicine to controlling a clinic in Detroit should think again. —Editorial, *Northwest Medicine*, May, 1957.

Retinoblastoma is found only in children.

* * *

Malignant melanoma is seen most often between 50 and 70 years of age.

* * *

Neuroblastoma is one of the most common tumors of childhood, and occurs most frequently during the first five years of life.

* * *

An unexplained abdominal mass often is the only indication of neuroblastoma in infants.

* * *

The most common site for neuroblastoma in childhood is the adrenal medulla. They may also arise from the celiac plexus, superior cervical ganglion, or other sympathetic nervous tissue.

* * *

Definite diagnosis of neuroblastoma is established by biopsy.



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- to correct mild B complex deficiency states
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*Squibb Quality—
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Each teaspoonful (5 cc.) supplies:

Elemental Iron	38 mg.
(as ferric ammonium citrate and colloidal iron)	
(equivalent to 130 mg. ferrous sulfate exsiccated)	
Vitamin B ₁₂ activity concentrate	4 mcg.
Thiamine mononitrate	1.0 mg.
Riboflavin	1.0 mg.
Niacinamide	5 mg.
Pantothenic acid (Panthenol)	1.5 mg.
Pyridoxine hydrochloride	0.5 mg.

Alcohol content: 12 per cent

Dosage: 1 or 2 teaspoonfuls t.i.d.

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Heart Beats

RHEUMATIC FEVER PROPHYLAXIS IN MICHIGAN

The Michigan Heart Association provides the funds for the operation of twenty-seven Rheumatic Fever Diagnostic Centers by County Medical Society components of the Michigan State Medical Society. The Centers are located throughout Michigan and receive guidance from the MSMS Rheumatic Fever Control Committee. The physical examination and the opinion and advice of local specialists, especially trained in the detection of rheumatic fever through fellowship training made possible by the Michigan Heart Association at recognized Rheumatic Fever Control Centers throughout the country, are provided gratis by Doctors of Medicine. For patients unable to bear the cost of the examination, the family physician

may request an order of the Probate Court for such service as a public charge, and the cost will be paid by the Michigan Crippled Children Commission, which expends one-tenth of its medical budget for the hospital care of children with rheumatic heart disease or rheumatic fever who have no insurance or other means of payment therefor. Those hospitalized because of recurrence of rheumatic fever would not have had recurrences in most instances if adequate prophylaxis had been administered, and upon formal request, the Michigan Crippled Children Commission is willing to bear the cost of prophylaxis (cost of the drug excepted) for persons under twenty-one years of age who have rheumatic heart disease or who

TABLE I. PROCUREMENT OF FORMS AND DRUGS FOR RHEUMATIC FEVER PROPHYLAXIS BY CITIES COUNTIES AND AREAS

HEALTH DEPARTMENT AREA	FORM C-62A		PENICILLIN OR SULFADIAZINE	
	A OBT.	B RET.	C INITIAL	D SUBSEQ.
Detroit City	1	10	32	25
Dearborn City	2	7	19	20
Rest of Wayne County	1	6	17	27
Arenac-Clare-Gladwin (District VII)	2	8	12	27
Barry	5	11	12	24
Bay	3	7	12	27
Berrien	4	11		28
Branch-Hillsdale	5	8	12	27
Chippewa-Luce-Mackinac	1	8	12, 16	28
Crawford-Kalkaska- Roscommon-Wexford-				
Missaukee (District I)	3	8	16	29
Delta-Menominee	30	7, 9	13	20
Gratiot	1	6	20	28
Houghton-Keweenaw-				
Baraga-Ontonagon	3	8	16	27
Ingham-Lansing	1	8	12	23
Mason	3	8	16	27, 31
Jackson	1, 2	6, 8	12, 17	23, 29
Kalamazoo	1, 2	6, 8	12, 17	28
Kent	3	7	13	26
Manistee-Mason	2	8	12	27
Marquette	1	8	12	28
Macomb	1	6	17	26
Monroe	2, 3	7, 8	12, 16	21
Montcalm	2	8	12	27
Muskegon	2	7, 8	12	33
Saginaw	1, 2	6	12, 16	22, 23
St. Clair	1	6	17	28
Shiawassee	5	8	12	28
Washtenaw	4	11	15	28

Key to Table

- A. Form C-62A obtained from Health Department
 1. On mail or telephone request by mail.
 2. By hand, at H.D. office.
 3. By hand, when penicillin delivered.
 4. "Given to physician."
 5. Not stated.
 30. Doctor has forms on hand.
- B. Form C-62A returned to Health Department
 6. By mail, by physician, before drug is issued.
 7. By mail, by physician, after drug is issued.
 8. By hand, when drug is issued to physician or nurse only.
 9. By hand, when drug is issued to physician, nurse, or family.
 10. By hand, when drug is issued to physician "or his messenger."
 11. Not stated.
- C. Penicillin or sulfadiazine obtained
 12. By hand, by physician, nurse, or family at H.D. office.
 13. By hand, by physician, nurse, or family at H.D. office.
 14. By hand, by physician, or his messenger at H.D. office.
 15. By hand, by physician, nurse, or family at H.D. office bringing the Physician's Prescription.
 16. H.D. nurse delivers while on circuit.
 17. By mail, after receipt of C-62A completed.
 18. By mail, pending receipt of C-62A completed.
 19. "Like polio vaccine"—physician or nurse signs receipt in office when drug picked up.
 20. Not stated. "Issued upon receipt of completed forms."
 32. By hand, by physician, or his messenger at Herman Kiefer Hospital—Registrar's Office, entrance on Taylor Street. Hours: 8:00 A.M. to 11:30 P.M. daily. Telephone Trinity 2-3334.
- D. Subsequently obtained.
 21. On special supplementary forms mailed out by H.D. and in by physician.
 22. By note or letter from physician to H.D.
 23. Physician fills out forms on file at H.D.
 24. Physician or nurse fills out forms at H.D.
 25. By note or letter by messenger.
 26. Physician obtains H.D. copy by mail or messenger, adds to it and returns it by mail.
 27. "Foregoing is repeated."
 28. Not stated.
 29. Physician's copy of C-62A sent to H.D. and foregoing repeated.
 31. H.D. nurse takes office copy to doctor.
 32. By hand, by physician, or his messenger at Herman Kiefer Hospital—Registrar's Office, entrance on Taylor Street. Hours: 8:00 A.M. to 11:30 P.M. daily. Telephone Trinity 2-3334.
 33. Progress report in triplicate required before penicillin is disbursed.

have had rheumatic fever and have never been the subject of a court order under the Crippled or Afflicted Children's Acts. There are between 4,000 and 5,000 such children at any one time and there may be in Michigan as many as 35,000 children under twenty-one who have had rheumatic fever or who have rheumatic heart disease but who are not known to the Commission. Each of these children should be on prophylaxis, and those over twenty-one who are associating with children—parents, teachers, older siblings—might well be.

In an "all-out" effort to curb recurrent attacks of rheumatic fever, the MSMS Rheumatic Fever Control Committee recommended and approved a plan of the Michigan Health Department, whereby a Michigan physician may secure at no cost from his local health department (from which he secures gamma globulin, poliomyelitis vaccine, triple toxoid, and other special preparations for use in prevention of reportable communicable diseases) two of the antistreptococcal agents which have been found to be effective in the long-term prevention of reactivation of rheumatic fever.

These are benzathine penicillin G and sulfadiazine. They are available only for administration over a period of years to anyone who has had rheumatic fever or who has rheumatic heart disease and are not to be used for treatment of an acute disease. The drug is obtained by the doctor when he has reported the case, or confirmed its having been previously reported, and sign a receipt for the medication. Each county has developed a method suitable to its circumstances, and the procedures in each county are shown below. The family physician is expected to exercise professional supervision of prophylaxis and is not expected to render gratuitous service in this connection, unless he desires to do so in the interests of economy in government.

Twenty-five counties replied to the request, "Briefly outline the method by which benzathine penicillin G is secured by doctors in your area." In all areas, the physician or his nurse or secretary may go to the distributor, report the case, receive the drug, and sign a receipt for it at the same time. For other mechanisms, refer to Table I. Counties not listed did not reply in time to be included.

AMA WASHINGTON LETTER

(Continued from Page 830)

WHO this year is expected to drop to a third of the total WHO budget. In dollars, however, the U. S. share continues to go up, as the charges to other countries.

* * *

The Export-Import Bank is making long-term, low-interest loans to some Central American countries to build health facilities, such as hospitals and sewage plants.

JULY, 1957

Say you saw it in the Journal of the Michigan State Medical Society

Just Published!

A New Quick-Reference Text

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Ideal for all doctors of medicine who feel the need for re-establishment of background in surgical fundamentals

Stressing the pathophysiologic mechanisms of surgical diseases, Dr. Gius describes in brief, easy-reading style the essential facts and factors—short of actual operative technic—surrounding the management (both diagnostic and therapeutic) of the surgical patient.

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More than 20 years of surgical experience have gone into the writing of this book...private and university hospital practice, extensive teaching at both undergraduate and postgraduate levels, military practice, and clinical research. Every one of the 31 chapters reflects this broad background and the resulting capacity to separate the wheat from the chaff.

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By JOHN ARMES GIUS, M.D., *Professor of Surgery, College of Medicine, State University of Iowa.* 720 pages; 275 illustrations on 151 figures. Approx. \$12.50.

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Please send the following for 10 days' examination.

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PR REPORT

TV HEART OPERATION SHOWERED WITH PRAISE

Following the March 12 color television broadcast of a live heart operation from The Grace Hospital in Detroit, stacks of mail were received congratulating sponsors for the educational TV venture.

Out-state viewers also had an opportunity to see the local history-making event since a kinescope of the hour-long show was made for later re-broadcast. Sponsors of the kinescope were MSMS, Michigan Heart Association, and Smith, Kline & French Laboratories of Philadelphia.

Thus far, TV stations in the following Michigan cities have shown the kinescope or carried the original broadcast:

Bay City.....	WNEM-TV
Cadillac	WWTW-TV
Detroit	WWJ-TV
Grand Rapids.....	WOOD-TV
Kalamazoo	WKZO
Lansing	WJIM-TV
Traverse City.....	WPBM

Excerpts of viewers' comments are printed below and represent typical reaction to the program.

"My wife and I wish to thank you for presenting the heart operation on TV last night. It was terrific—a convincing demonstration of the skill a surgeon must have. . . . I could not help but wonder at the tremendous amount of study and research that had to be done before such operations were possible."

* * *

". . . As a high school student, it was very interesting and educational because we are studying the heart and heart diseases in Biology. For almost six years now my ambition in life is to become a doctor and maybe some day I'll make it."

* * *

". . . Your program left us in a better state of mind in regards to our son's future. As long as such great strides are being taken in heart surgery his chances for a normal life seem almost certain."

* * *

"In my opinion it was the best program I have ever seen on a TV screen in North America. It was nice for a change—no advertising, no quiz or gunsmoke."

* * *

"If more programs of this type could be made available to the general public, I sincerely believe that any misunderstanding that may exist between the layman and the medical profession with respect to the high cost of medical and hospital treatment would be forgotten."

* * *

"The outstanding service rendered the patient from the time he enters the hospital, during surgery, and until he is released from the hospital, to insure a healthy future, more than outweighs the cost involved."

* * *

"The program was a public relations plus for the medical profession. Again, congratulations and thanks."

"This is just a short note to express my appreciation, as a layman, for your 'Heart Operation' program."

"I truly believe such presentations will serve much in the way of creating an interest, understanding and appreciation of the medical advances that have been, and are being made, today. I sincerely hope that we will once again have an opportunity, in the near future, of witnessing such a rewarding presentation."

* * *

"As an interested teenager, I gained much from the program with its panel of distinguished doctors. I would have enjoyed it more if I was assured the surgeon could work as well in the noise as in silence."

* * *

". . . in ten years of viewing, I have never before written to . . . express my thanks and gratitude for a presentation."

* * *

"I wish to congratulate you on your Heart Operation program. Hope we can see more programs of this nature. Also, a note of thanks to the doctors who talked in terms that we could understand."

* * *

"In our opinion, we feel that the showing of such an operation will give the patients and viewers a feeling of complete confidence in the hands of their doctors."

* * *

"I didn't relax during the entire hour, but when the telecast was over, I felt that I had been very privileged to witness a heart operation and see the skill and dexterity of dedicated surgeons."

MSMS PUBLIC OPINION SURVEY UNDER WAY

The people of Michigan are going to have a chance to tell doctors exactly what kind of medical service they want.

In one of the biggest public opinion samplings of its type ever undertaken in Michigan or the nation, Michigan's M.D.'s are going straight to the people to get the facts with a statewide study.

On May 23, the first public announcement of the survey was made. The people were told of the action of the House of Delegates at the Detroit April meeting, when The Council of MSMS was instructed to conduct a survey to determine just what the people prefer in the way of medical-surgical coverage from prepayment plans and health insurance.

Speaking to the assembled delegates, L. Fernald Foster, M.D., Secretary of the Michigan State Medical Society and President of Michigan Medical Service, said:

"Evidently, to date, the service afforded the patient by the doctor has been very acceptable to the patient or he would not have continued his support of the program. We, who have the responsibility for the administration of the program, have the task of giving all the patients what they want and are willing to pay for within the philosophies of the plan."

(Continued on Page 838)



fore!

STERANE® won't straighten his hook, cure his slice or put him on the green in three . . . but STERANE may reduce your rheumatoid arthritic's handicap of joint pain, swelling and immobility. The most potent anti-rheumatic steroid, STERANE (prednisolone) is supplied as white, scored 5 mg. tablets (bottles of 20 and 100) and pink, scored 1 mg. tablets (bottles of 100).



PFIZER LABORATORIES Division, Chas. Pfizer & Co., Inc. Brooklyn 6, New York

MSMS PUBLIC OPINION SURVEY

(Continued from Page 836)

George W. Slagle, M.D., of Battle Creek, President-Elect of the Michigan State Medical Society, made the proposal for the complete study when he addressed the House of Delegates at the same time. He said:

"I propose that we find out what the public really wants and that we get incontrovertible evidence to that effect. This will help us greatly when we talk to certain pressure groups who would have us believe that the real wants of the people are the same as the demands made by the leaders of pressure groups. . . . In other words, I propose that we go to the people through a survey or study that will give us part of the knowledge we need upon which to predicate any changes in our service as well as the information necessary to meet any false claims that may be made. I propose, further, that this study or survey determine the extent and willingness of people to pay for certain categories of medical and surgical service so that we can better determine upon the most attractive, as well as the most valuable, package to offer."

The May 29 press release disclosed that the services of Professor David Luck, prominent researcher and Director of the Business Research Institute, Michigan State University, had been retained as survey consultant. Also, D. Bruce Wiley, M.D., chairman of the MSMS Survey Committee, announced that Richard Oudersluys, president of the Market-Opinion Research Company of Detroit, had been engaged to work with Dr. Luck in carrying through the survey development and evaluation. A special survey assistant, Miss Kay Asby, has been retained by MSMS to assist in the multitudinous details surrounding the survey.

The fact that the Michigan Health Council had agreed to aid MSMS in conducting the mail portion of the survey was disclosed in early June by J. K. Altland, M.D., Health Council president.

Survey Methods Detailed

Fifty-one thousand people will be asked to give their preference as to the medical-surgical services they would like included in any system or plan for medical service coverage. This was pointed out in the June 4 release. The statement also said that two survey methods will be employed. One, the mail survey to 50,000 citizens, the other, a personal interview with at least 1,000 Michigan families. The latter survey will be carried out by Mr. Oudersluys' firm by means of a staff of trained researchers.

In every public announcement, the point was restated that the doctors are anxious for this survey because they recognize that the M.D.'s and the public are partners under any form of medical service coverage. Therefore, the wants, needs and desires of the public are important considerations in the development of any improved version of prepayment plan or health insurance policy.

Not Blue Shield Survey

Significantly, there is no mention of either Blue Shield or Blue Cross except as they come under the heading of prepayment plans. This is deliberate and accurate. This is not a Blue Shield survey. It is an MSMS survey of what the people want from any plan or system of medical coverage.

Four-Part Study

Actually, the public-opinion survey is but one part of a four-part study of the problem. In addition, every member of MSMS will be surveyed by means of a mail questionnaire. The doctors will be asked their views on medical service plans and coverage. The information will be collated with results of the other "partner's" survey.

All existing information on what the public's medical needs are will be brought together and included in the final survey report. In addition, there will be an evaluation of the public's willingness to pay for the services they feel most important. Thus, the report will show in pretty clear terms just how much the public wants and how much it expects to pay.

The survey timetable calls for the actual surveys to be completed in July. This will allow needed time for the tremendous job of evaluating the material and preparing the final survey report.

The survey report will be presented to the September meeting of the MSMS House of Delegates in Grand Rapids.

Additional plans for the study call for the co-operation of county medical society speakers bureaus. By this means, the doctor can personally acquaint the people with the background and purpose of the study.

Other methods to acquaint the public with the facts and obtain information are envisioned utilizing newspapers and exhibits at county and state fairs.

1957 MEDICAL FORUMS

As predicted in the MSMS PR manual "Winning Friends for Medicine," public forums on medical subjects of general public interest continue to be top public relations vehicles for county medical societies.

So far this year, at least seven CMS's have joined hands with their local press facilities and organized top-notch well-attended public forums on such most-discussed subjects as geriatrics, cancer, mental illness, polio and the cost of medical care.

The willingness of the press to provide the necessary publicity, the public's eagerness to participate in the programs, and the wholehearted support of civic and service groups have contributed to the success of these public service undertakings.

(Continued on Page 842)

Meat...

and Protection Against Hypochromic Anemia

Hypochromic anemia, the most common nutritional deficiency in children in the United States, occurs most frequently in the second six months after birth.¹ A major cause of anemia in early infancy may arise from insufficient transfer of iron from the mother to the fetus,² since anemia is not uncommon in pregnant women.

A first step, then, toward prevention of hypochromic anemia in the infant is the provision of a prenatal diet rich in available iron and in high quality protein. A second and most important step is the addition of foods high in utilizable iron (egg yolk, sieved meat and vegetables) to the infant's daily diet as early as possible (usually 3 months after birth).¹

Meat contributes valuable amounts of anabolically effective protein, B vitamins, readily available iron, and other minerals to the nutrition of the pregnant and lactating woman. The feeding of sieved meat to infants after the third month provides well-utilized iron and aids in the prevention of hypochromic anemia.

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1. Jackson, P. L.: Iron Deficiency Anemia in Infants, Editorial, J.A.M.A. 160:976 (Mar. 17) 1956.
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The nutritional statements made in this advertisement have been reviewed by the Council on Foods and Nutrition of the American Medical Association and found consistent with current authoritative medical opinion.

A m e r i c a n M e a t I n s t i t u t e
Main Office, Chicago...Members Throughout the United States

1957 MEDICAL FORUMS

(Continued from Page 838)

The Menominee County Medical Society, in co-operation with the Menominee High School Adult Education Program, on March 18 successfully concluded a six-week series of lectures on community health problems. Among the topics discussed were highway safety, polio and the virus diseases, and other topics of general community interest.

Four of the nation's top medical problems were discussed during the 1957 series of free medical forums sponsored in Grand Rapids by the **Kent County Medical Society** in co-operation with the Grand Rapids Kiwanis Club and *The Grand Rapids Press*. Jack Hoogerhyde, M.D., Chairman of the Forum Committee, announced that the forums attracted a total of about 1,750 persons. The topics which were presented during the series were "What Can Be Done About Mental Illness?"; "Recent Trends in Cancer Treatment"; "New Hope for the Heart Patient" and "Cost of Medical Care."

The Kalamazoo Academy of Medicine and the Kalamazoo *Gazette* joined forces during February and March to present a series of medical forums on health topics of public interest. Health problems discussed were "High Blood Pressure"; "Cancer"; "Disorders of Digestion" and "Your Children, From Tots to Teens." Glen C. Callander, M.D., of Kalamazoo, served as general chairman of the forum series.

The Calhoun County Medical Society recently inaugurated a medical forum series in Battle Creek. The series were sponsored by the medical society in co-operation with the *Battle Creek Enquirer* and *News*. Two forums were held, the first on the subject of heart disease and the second on cancer. Plans are now being made for continuing the series in the fall of 1957. General Chairman of Arrangements for the series is Robert E. Fisher, M.D., of Battle Creek.

A series of medical forums on geriatrics topics began April 24 in Lansing. Among co-sponsors of the forum series is the **Ingham County Medical Society**. There will be five forums in the present series.

A medical forum was held in Bay City on March 27 on the subject of cancer. Nine Bay City physicians conducted a panel discussion on the subject to herald "Cancer Month," a fund-raising drive which began April 1.

Ypsilanti was the scene of a free medical forum on April 8 sponsored by the Ypsilanti Kiwanis Club in co-operation with the **Washtenaw County Medical Society**. The topics discussed were arthritis and backache. Also sponsored by the Washtenaw County Medical Society was an Ann Arbor forum series. The four medical forums in Ann Arbor were also sponsored by the Ann Arbor

Kiwanis Club, the *Ann Arbor News*, and the University of Michigan Medical School.

AMA SURVEYS ROLE OF MEDICAL ASSISTANTS

The key to improved efficiency in a physician's office may be in the hands of his medical office personnel, a nationwide survey reveals. The survey supports the long-held view of MSMS on the vital role that medical assistants must play in the modern medical office.

Are medical secretaries and assistants properly trained for their jobs? Does the physician-employer properly delegate duties to office personnel to make best use of individual skills and training? Are there tasks which the physician should assign to an aide in order to give him more time to see patients?

These are some of the questions which are answered in a study conducted last year to determine the ideal knowledges, skills and personal qualities of medical secretaries. The study was conducted by Harold Mickelson in connection with his work toward a Doctor of Education degree at Indiana University as a co-operative venture with the American Medical Association.

Mickelson concludes that "physicians are not making maximum use of their extensive training when they unnecessarily perform semitechnical medical and business activities." To help physicians determine what responsibilities can be properly delegated to office personnel, Mickelson is currently preparing a system for assigning duties which will be furnished by AMA to medical societies.

According to a recent *Medical Economics* survey, "81 per cent of all self-employed doctors now have at least one full-time or part-time secretary, nurse, technician or Girl Friday. Four years ago, only 75 per cent had such assistants."

The Mickelson-AMA study was made to provide a basis for the development and improvement of educational programs in schools for the training at a high level of secretaries for physicians' offices. The ultimate objectives are:

1. To provide physicians with the most competent business-medical assistance possible and
2. To raise the level and status of physicians' secretaries by improving the quality of their work.

On the basis of the survey, a number of steps which medical associations and medical secretary-assistants groups can take to help provide a greater force of better-trained aides in the future are suggested:

1. Encourage schools with the necessary personnel and facilities to offer high-quality medical secretarial training.
2. Recruit high school graduates for high-quality medical secretarial training.

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The Problem of Progressive Exophthalmos in Thyroid Disease

John W. Henderson, M.D.
Ann Arbor, Michigan

THE PATIENT with progressive exophthalmos associated with thyroid disease has become in the past decade a challenge to the surgeon, to the ophthalmologist and to the internist alike. The term *progressive exophthalmos* is preferable to thyrotropic exophthalmos, exophthalmic ophthalmoplegia, malignant exophthalmos and hyperophthalmopathic syndrome as being more descriptive and less likely to infer an unproved etiology. The distressing complications of forward proptosis of the globe such as ulceration and even perforation of the cornea and at times associated glaucoma and optic nerve involvement, have been a perplexing problem to the ophthalmologist.

When the comprehensive article of Mulvaney¹⁴ appeared in 1944, a complete and logical basis for the division of exophthalmos into thyrotoxic and thyrotropic types appeared to be established. Mulvaney made a clear-cut distinction between the thyrotoxic and thyrotropic types as he conceived of them. The thyrotoxic type of exophthalmos was one in which there was a small measurable exophthalmos due to weakening of the extraocular muscles and usually not exceeding one to two millimeters, appearing in association with thyrotoxicosis, more frequently in younger females, and usually relieved by the successful treatment of the thyrotoxicosis. In contradistinction,

he described thyrotropic exophthalmos which was more frequently present in middle-aged males, not necessarily associated with an elevation of the basal metabolic rate, and demonstrating typical signs of congestion within the orbit. He conceived of this as being an orbital reaction resulting from lack of the inhibitory effect of the thyroid gland on the pituitary with side effects in the orbit as the result of undamped TSH production. He further distinguished between thyrotoxic and thyrotropic types on the basis of pathologic changes in the extraocular muscles. However, it soon became apparent in following patients with exophthalmos, that such a clear-cut distinction was not always possible. While a patient might demonstrate the pure signs of thyrotoxicosis, there would also be an associated progression of thyrotropic findings. Whereas Mulvaney stressed the relief of myasthenic weakness of the extraocular muscles following treatment of thyrotoxicosis, explaining in this way the relief of the prominence of the eyes following surgery, other authors found different evidence on this point.

Dobyns⁶ for example, studied 233 consecutive thyroidectomy patients with serial exophthalmometer measurements and found that the eyes of all but nine of the patients definitely increased in prominence after surgery and significantly so in more than 50 per cent. The majority of these patients showed gross improvement in appearance of the eyes regardless of the increasing proptosis. He also found that the greater the fall in basal

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metabolic rate, the greater was the increase in exophthalmometer measurement. Therefore, one must distinguish between the relief of the lid retraction following treatment of thyrotoxicosis which in itself gives an improved appearance to the patient, and the actual measurement of the protrusion of the eye regardless of the patient's appearance.

Dobyns⁷ was also able to collect 129 patients from the literature where loss of vision or of the eye had occurred during severe thyrotoxicosis, further casting doubt upon the sharp demarcation of the two types discussed.

The thyrotropic group of Mulvaney in which released thyrotropic activity after thyroidectomy produced orbital changes, has been widely documented and studied. However, many reports of failure of thyroid administration to uniformly inhibit thyrotropin, (or TSH) production, together with the failure to demonstrate increased TSH production in all cases of progressive exophthalmos during an active phase, have raised other doubts.

Cordes⁵ separates exophthalmos cases into *progressive* and *non-progressive*, since in his opinion the ocular changes that occur in thyrotoxicosis should not be confused with the progressive disease referred to as "thyrotropic exophthalmos." He further feels that blood TSH levels would aid in the distinction. Unfortunately, a simple and reliable method for such a determination is not readily available.

Falconer and Alexander⁹ pointed out that although all of their patients who developed malignant exophthalmos after thyroidectomy showed an excess of blood TSH, so also do most patients after medical or surgical therapy for toxic goiter. Purves and Griesbach¹⁵ found that nine of thirty-seven sera tested for TSH in malignant exophthalmos did not show elevation, even in the progressive phase. They felt also that in most individuals the presence of excess TSH in the blood does *not* lead to malignant exophthalmos, and suggested a correlation between the two but no direct causal relationship. Recent work by Dobyns⁸ using the Atlantic minnow, fundulus, suggests a further potent pituitary hormone EPS, which is not the same substance as TSH, and which can be demonstrated in the blood serum of patients suffering with severe or progressive exophthalmos. A correlation was suggested between the degree of

exophthalmic response in the fish and the stage and severity of the patient's exophthalmos.

The current view may be stated that severe progressive exophthalmos appears in three clinical states: (1) as a part of Grave's disease—in addition to the thyrotoxic signs; (2) more often after thyroidectomy when the picture of thyrotoxicosis has been ameliorated; (3) in patients without goiter or preceding thyrotoxicosis.

Dobyns⁷ believes that these are all basically the same phenomenon, and can occur in all degrees from slight increase in prominence of the eyes to severe proptosis. If the course is rapid, orbital congestion does not allow adaptation and severe ocular changes may occur. If the course is slower, there may be gradual compensation without serious ocular damage, but the longer the process lasts, the more irreversible it becomes. The process may be self-limiting, and when the driving force behind the disease abates, exophthalmos may regress or remain fixed, with return of as much extraocular muscle function as reversibility may permit.

Falconer and Alexander⁹ also felt that their findings tended to refute Mulvaney's idea of two distinct types of exophthalmos, favoring the view that the condition is a single entity. By examining their pathology specimens of involved muscle and reviewing Mulvaney's differential on a pathological basis, they believed that their findings suggested a common histologic process which varied in intensity and degree between individual patients. They concluded that malignant exophthalmos is a single pathologic entity which can occur either in association with or independently of enlargement of the thyroid and thyrotoxicosis.

Hedges and Rose¹¹ state that the hyperophthalmopathic syndrome may best be regarded as a clinical spectrum, ranging from simple proptosis and lid retraction to the most severely progressive form with congestive phenomena and visual loss. They could not justify the division of the syndrome into the so-called thyrotropic and thyrotoxic forms, in spite of the undoubted occurrence of wide clinical variation.

In addition to the reports of failure of thyroid administration to inhibit thyrotropin production uniformly or to produce improvement in case with the progressive form of exophthalmos, the results which have been gained with pituitary irradiation might likewise cast doubt upon the

basic hypothesis. Our experience with pituitary irradiation in treatment of these cases has been mainly that of Beierwaltes^{2,3} at the University Hospital, and we have been able to follow closely all patients so treated. Twenty-eight patients with malignant exophthalmos were treated with x-rays directed to the region of the pituitary gland, and thirteen of these showed a significant response in exophthalmometer measurements after treatment. Eleven of the patients began to respond in less than seven months, and maximum recession reached a median of 3 to 4 mm. during the nineteen-month average follow-up procedure. Beierwaltes also suggested that response occurs only if the exophthalmos has been present less than one year.

A point made by Beierwaltes, and often overlooked, is that the size of x-ray ports is sufficient to overlap some retrobulbar soft tissue. The type of acute change in the orbit in the congestive phase of progression might well be expected to respond to irradiation. Other workers have not uniformly reported the size of ports, but in some this has been done, and their size is comparable. Beierwaltes believes at the present time that the x-ray acts primarily on the retrobulbar tissue rather than the pituitary. He followed the FSH levels serially in several patients, and no change was found after irradiation, indicating lack of pituitary response.

Arnold¹ has shown that the hypophysis is resistant to high doses of x-irradiation and demonstrated in monkeys that the hypothalamus shows changes in the paraventricular and supraoptic nuclei when x-ray is directed to the pituitary region. He also stated that the delayed intervals before change after irradiation observed by Beierwaltes in his clinical study conformed rather strikingly with the time intervals found for hypothalamic nuclear change in his experiments. More recently, Ganong, Fredrickson, and Hume¹⁰ have shown that selective lesions of the anterior median eminence of the hypothalamus produced thyroid atrophy in the dog. Therefore, it is not certain at present whether the results of irradiation observed clinically are due to pituitary change, hypothalamic alteration or effects on the retrobulbar soft tissue. Further, the tendency of progressive exophthalmos to run a self-limiting course in many cases raises other questions.

A further interesting study has been that de-

scribed by Reynolds, Corrigan and Haydn¹⁶ from the Radiological Research Division at Harper Hospital in Detroit, and further reported by McKean and Hamburg.¹³ In the patients who showed progressive exophthalmos frequently reported as so-called "euthyroid" types, where the laboratory studies ordinarily used in thyroid function are usually within essentially normal limits, but where there are with a careful history manifestations of both hypothyroidism and hyperthyroidism, a precise surface scanning technique in the I¹³¹ tracer studies shows a peculiar spotty type of radioactive iodine uptake. This is characterized by a low level accumulation of the labeled iodine over much of the gland but with a rapid and sustained uptake in one area or several areas usually in the central thyroid zone. It is the feeling of these authors that these toxic foci are directly related to the progression of the exophthalmos in what otherwise might be considered a "euthyroid" patient. Therapy has been the use of therapeutic radioactive iodine together with an appropriate dosage of thyroid extract following such treatment.

From his studies at the University of Michigan at the present time, Beierwaltes⁴ believes that the patient with signs of progressive exophthalmos should be managed as follows: Hyperthyroidism should be treated first, if present, preferably with radioactive iodine. If no improvement or increase of eye signs occurs, desiccated thyroid should be tried for a few months. If no improvement or progression occurs, pituitary and retro-orbital irradiation should be done. If, after six months, the patient is worse or stationary with a high measurement endangering the eyes, decompression is indicated.

From the ocular point of view, four basic problems in management must be considered: (1) protrusion of the globe sufficient to endanger the cornea; (2) the occurrence of muscle palsy sufficient to produce visual disturbance; (3) the occurrence of glaucoma during the course of the disease and, (4) direct involvement of the optic nerve.

When, in addition to the upper lid retraction and infrequent blinking which are often seen in thyrotoxicosis, a progressive protrusion of the eyeball also ensues, the added factors of evaporation and lack of closure of the eye during sleep will often result in superficial drying of the cornea,

and at times an actual ulceration occurs. In severe cases, this may even lead to secondary intraocular infection and loss of the globe. Such a patient must be examined carefully with the use of fluorescein dye in order to detect early points of surface drying of the cornea. If these are present, a prescription is usually given for 1 per cent methylcellulose drops, to be used at intervals frequent enough to maintain corneal moisture. In addition, covering the eyes with well-vaselined eye pads at night may be necessary. The judicious use of lateral tarsorrhaphy, bringing the lids together to allow better protection of the cornea, is often also an important measure. However, if corneal drying and staining become marked even with such management, surgical decompression of the orbits is almost mandatory.

Involvement of the extraocular muscles can often lead to a distressing diplopia. The characteristic muscle paralysis of progressive exophthalmos may often be a weakness of convergence but more frequently a paralysis of the superior rectus muscles occurs, limiting upward gaze of the eyes. In many cases, the progress of the disease may be more advanced in one eye than the other, leading to a troublesome vertical diplopia. In other cases, a more complete lack of motility may result from the basic pathologic changes in the extraocular muscles. Characteristically, the involved muscles enlarge and undergo degeneration with the accumulation of lymphoid tissue and final fatty breakdown of muscle fibers. In several cases of our series, orbital exploration has been done in individuals with unilateral progressive exophthalmos only to reveal the enlargement of a single extraocular muscle with characteristic pathologic changes on biopsy. During the acute phase of the process, aid can often be given the patient by the incorporation of corrective prisms in his lenses in order to overcome the double vision. After the process has reached its peak, and then quieted, certain cases with residual diplopia may be aided by surgery of the extraocular muscles.

There is little information in the literature as to the glaucoma occurring during the course of progressive exophthalmos. In the routine follow-up of such patients in our clinic, tonometry is done on each visit, and it has been surprising to find that a large number of these patients will show an elevation of the intraocular pressure at some time during the course of the disease. One

must be extremely cautious in evaluating this as a true glaucoma, since the pressure of the lids upon the globe may, in itself, elevate the ocular pressure during the time of measurement. With full lids due to herniation forward of orbital fat, any pressure exerted by the examiner upon the lids in making the examination can affect the final answer. This has been referred to by Reudeman as "thumb glaucoma." In addition, weakness of the elevator muscles of the globe due to the basic pathologic process may in itself create a great effort on the patient's part in looking upward during the time the pressure of the eyeball is measured. One patient in our series was shown to have a difference of almost 30 mm. of mercury on the tonometer scale between the high pressure recorded when he was looking upward against his weakened superior rectus muscles and the normal pressure recorded when he was looking downward away from such involved muscles. In most instances, the routine use of pilocarpine or other miotic drugs has been sufficient to control the elevation of tension in those where it has been found. However, there is a group in which it is very difficult to determine whether the reduction in vision together with change in the visual fields and elevated pressure are the result of true glaucoma or of pressure effects upon the optic nerve at the apex of the orbit during an acute congestive phase. It is likely also that the orbital congestion at this time delays venous return from the eyeball sufficiently to interfere with the normal pressure gradient of fluid exchange through the eye. In these cases, it is very difficult to decide when the use of drops has failed to reduce the tension whether orbital decompression or direct glaucoma surgery upon the globe should be performed.

During the acute phase of congestion in the orbit, direct pressure effects upon the optic nerve may sometimes result in a marked reduction of vision in one or both eyes. It is unlikely that traction on the optic nerve due to proptosis is a factor, since there is approximately 8 mm. of "slack" present in the normal optic nerve. In certain cases, the process may be severe enough to produce papilledema with associated central visual loss. This, of course, is different from the papilledema of increased intracranial pressure where central vision is usually spared unless some associated localizing visual field defect occurs. Igersheimer¹² recently reported on six such patients

with visual changes and commented on the treatment necessary. He believed that some of the cases run a self-limiting course with gradual visual improvement. In one case where systemic corticotropin was used, considerable improvement in the optic nerve involvement resulted, but little regression in the exophthalmos was noted. In two cases, orbital decompression was felt necessary, and good visual recovery resulted. Igersheimer believes that a pallor of the optic nerve head appearing during the course of visual loss gives a poorer prognostic outlook for return of vision. At the present time, if a patient presented with severe papilledema and visual loss associated with progressive exophthalmos, we would consider orbital decompression to be necessary. The more extensive Naffziger procedure, in which the roofs of the orbits are removed through a transfrontal craniotomy, has not been used in recent months at our hospital since the development of a new procedure by Dr. Robert C. Bassett of our neurosurgical staff. Utilizing a modified extradural approach similar to that used in trigeminal rhizotomy, he has been able to remove the lateral and superior walls of the orbits without exposure of frontal lobes and the results to date have been most encouraging.

In conclusion, I should like to review some of the basic signs of progressive exophthalmos which should lead to suspicion on the part of the surgeon in managing a patient with acute thyrotoxicosis. These findings are in addition to the usual signs of retraction of the upper lid and the other numerous lid signs given to us by our eponymic medical ancestors. Any evidence of congestion within the orbit as shown by fullness of the lids, lack of reducibility of the globes into the orbits, interference with ocular motility, chemosis of the conjunctiva together with injection of the anterior ciliary vessels overlying the lateral rectus muscles, should lead to caution in

the surgical management of such a case. Fortunately, the incidence is not high in the usual run of thyrotoxicosis patients, but the avoidance of later ocular complications is much to be desired.

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The ever-present possibility of cancer must always be kept in mind, and the conscientious physician will be unhappy and worried until the question is settled pro or con, whether by himself or by someone else.

* * *

The absolutely minimal requirement for cancer detection is a thorough pelvic examination, with careful palpation and meticulous inspection of the cervix in the best possible light.

The easier the diagnosis of cancer, the worse the prognosis.

* * *

The most important single thing that women can do to protect themselves against cancer is to have a competent gynecologic examination every six months.

* * *

In the breast, obvious cancer is late cancer.

The Thyroid Gland in Obstetrics and Gynecology

Edwin J. DeCosta, M.D.
Chicago, Illinois

AS Will Rogers was wont to say, "All I know is what I read in the newspapers." I have often wondered how much we know because we read it in a medical advertisement or because the detail man told us so. Specifically, let me quote from current advertising of a so-called improved thyroid medication: "The current literature stresses that a puzzling sterility, annoying obesity or refractory menstrual disorder is more often the expression of hypothyroidism than is classic myxedema." If we spend a moment in analyzing this phrase, we can recognize masterful innuendo because actually the advertiser does not say that hypothyroidism is the cause of sterility, obesity or menstrual disturbances—he merely says that these conditions are more often an expression of hypothyroidism than is myxedema.

Nor can we blame it all on those who make and sell the products; the physician, too, contributes his all to further the acceptance of questionable tenets. Only a few months ago the following statement was made by one of our own members and was widely circulated to the profession:

"The most common obstacles to ovulation are excessive gain in weight and thyroid hypofunction. Normal ovulation returns to some patients with no evidence of hypothyroidism when given thyroid extract—hence this hormone may be tried to clinical tolerance without reference to basal metabolic rate, blood cholesterol or protein bound iodine determination."¹¹

The entire question of the use of thyroid extract in the presumed normal individual is one of utmost confusion. You will find many enthusiastic dissertations lauding thyroid even as the *only* potent hormone we possess. You will find a fair number of iconoclasts, too. But most illuminating of all is the individual who can be enthusiastic in 1948 and a doubting Thomas in 1954. I am not being critical. I only site this example to show how difficult the problem of therapy can

be, because I am referring to the published papers of one of the best and most careful and most honest workers in the field. In 1948, in a study of the use of thyroid extract in gynecologic abnormalities, it was concluded that thyroid therapy is advantageous in many cases of abnormal menstruation and sterility in the absence of clinical hypothyroidism.⁵ In 1954, the same author, in reviewing a group of euthyroid patients with menstrual disturbance or sterility, concludes that it is questionable whether thyroid administration for the treatment of menstrual abnormalities and sterility is of any value in these patients.⁴

Obviously, we can have three states of thyroid activity: hypothyroidism, normal or euthyroidism and hyperthyroidism with innumerable gradations between one extreme and the other. We should consider not only the effects of obvious deviations from the normal but also the effects of small variations. In the following paragraphs this large order will be applied to gynecology and to obstetrics.

Before we can discuss either hypothyroidism or hyperthyroidism, we must have a clearly established concept of what is normal. Here we encounter, I believe, the basic cause for much of the confusion and controversy to be found in the literature over the past thirty-five years. We may have difficulty in determining what is normal. The diagnosis of abnormal thyroid activity is based upon a careful history and physical examination. This is augmented by certain laboratory procedures, which are far from the specifics we would like, but which often play a very important part in the ultimate decision.

The oldest and most frequently employed laboratory procedure is still the determination of basal metabolic rate. It is subject to many errors and determines thyroid activity by inference. The normal range of this rate is considered to be from +10 to -10 or +15 to -15. Recently, we have come to recognize hypometabolism and hypermetabolism without thyroid aberration. Thus a person with hypometabolism may have a basal

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metabolic rate of —30 and not be hypothyroid at all. The basal metabolic rate is least reliable when needed most; namely, in the recognition of mild degrees of dysfunction. Technical errors can play an enormous rôle. The patient must be relaxed and must have had a good night's sleep. There even exists a difference of opinion as to the limits of normal of the basal metabolic rate.

TABLE I. CONDITIONS RAISING THE BASAL METABOLIC RATE

Fever (7 per cent for each degree F.)
Congestive heart failure
Pulmonary insufficiency
Anxiety states
Leukemia
Lymphomata
Erythremia (polycythemia)
Pheochromocytoma
Diabetes insipidus
Hyperpituitarism
Acromegaly
Cushing's syndrome
Poisoning with thyroid substance
Technical errors in the test
Improper preparation of patient

Factors other than thyroid function also influence the basal metabolic rate in either direction. Table I enumerates those conditions which raise the basal metabolic rate. Attention is particularly called to fever, anxiety, and technical errors. Table II lists those conditions which will lower the basal metabolic rate, particularly obesity, anemia, and again technical errors.

Then, we have the determination of blood cholesterol, once thought to be a specific indication of thyroid disturbance, now merely another tool which serves as a signpost. The serum cholesterol is usually elevated in hypothyroidism, but the normal variation of 150-300 mg./100 cc. is such as to render the test more or less useless. In addition, conditions other than hypothyroidism can cause hypercholesteremia, especially diet, diabetes, and kidney disorders.

Today we are concentrating more directly on the activity of the thyroid gland. The level of circulating thyroxine can be determined chemically by the iodine content of the plasma (PBI or SPI). The amount of iodine is infinitesimal, varying normally from 4 to 8 micrograms per 100 cc. As a result, the test is useless unless great technical care is exercised and all extraneous sources of iodine are eliminated. Incidentally, if the patient has recently received stable iodine, particularly in oil or colloid, the determination of protein-bound iodine is of no value.

We may also utilize the radioactive isotope, I^{131} , in determining thyroid gland activity. This may be done in several ways which we shall not consider here, but the determination of the amount of radioactive iodine taken up by the thyroid is probably our best index of thyroid activity.²⁵

Having briefly outlined the methods available to reach a satisfactory diagnosis, we must spend a

TABLE II. CONDITIONS LOWERING THE BASAL METABOLIC RATE

Starvation (or even temporary reduction of caloric intake below expenditure)
Obesity
Shock
Severe anemia
Nephrosis
Addison's disease
Hypopituitarism or Simmonds' disease
Hypothalamic disorders
Use of old soda lime in apparatus
Inward leak of air in apparatus

moment considering the very important physiologic relationship of the thyroid and pituitary glands, and the effect of administering thyroid extract to normal and to hypothyroid individuals, where incidentally the effects are quite different.

The activity of the thyroid is controlled by the thyrotropic hormone, secreted by the pituitary. Between these two endocrine glands, there exists a reciprocal relationship. Thus, thyroxine secreted by the thyroid inhibits thyrotropin, and a proper balance between the two leads to normal thyroid function, clinically to euthyroidism. If thyrotropin secretion is excessive, hyperthyroidism may ensue; if deficient, hypothyroidism. This relationship then parallels that of the pituitary-ovarian and pituitary-adrenal axes.

Now the administration of exogenous thyroid does two things: It floods the body with thyroxine and suppresses thyrotropin. In the hypothyroid patient, the increased thyroxine of exogenous origin may be desirable, but in the euthyroid person the suppression of thyrotropic activity leads to a decrease in endogenous production and even to temporary hypothyroidism.¹² This suppression of thyroid activity in the normal person can be readily demonstrated clinically.

Thus, from both the theoretical and clinical viewpoint, there is no reason to administer thyroid extract to euthyroid individuals. Unless the dosage is excessive, one merely substitutes exogenous thyroid extract for endogenous secretion.

We therefore dissent from the counsel of those

who refer to "puzzling sterility, annoying obesity or refractory menstrual disorders" as evidence of a hypothyroid state and, of course, an indication for thyroid medication. We must have actual evidence of thyroid deficiency. If hypothyroidism is evident, we shall use thyroid medication whether the patient is infertile, obese, or not.

What do we know about the relationship of the thyroid and the gonads? One could postulate that some relationship must exist, if only that due to a general tissue response to thyroxin. After all, if the brain or muscle needs thyroxin, so does the gonad. Perhaps this is the only relationship. Perhaps it is more complicated. We must remember that the adenohypophysis is motor to the gonad as well as the thyroid. There does appear to be some association, and perhaps one more closely related to female metabolism than to that of the male. Why, for example, should toxic goiter be many times more common in the female than the male individual? Why should the thyroid gland become enlarged at puberty, during pregnancy and at the menopause? Why should hyperthyroidism often appear during or just after pregnancy? These questions certainly indicate more than a casual relationship between the thyroid gland and femaleness, but the details still await elucidation.

Let us consider the relationship of thyroid function and fertility. I have chosen fertility since it is the prime expression of ovarian activity. Actually, we run into problems almost before we start because we do not know the extent of thyroid activity which is to be considered normal even in different strains of the same species. Perhaps one animal may get along well with minimal thyroid function, while another may require a much greater activity. For example, it has been shown that certain mammals may conceive, carry and deliver live young after destruction of the thyroid gland by one of several methods.^{10,15-17} Our experimental work confirms this with reference to the rabbit, although thyroidectomized rabbits make very poor mothers and the young die within a few days from neglect. Others have reported contradictory observations using the same animals. Chu and Chu and You noted that rabbits did not conceive after thyroidectomy until thyroid extract was administered.⁷⁻⁸ They believe that the interference with pregnancy was an expression of interference with gonadotrophic activity. No one has confirmed this work.

In the human being, one frequently encounters

reference to pregnancy following thyroid therapy. No small part of our modern attitude toward the importance of thyroid in the management of fertility problems dates back to Litzenberg's paper in 1926, in which he states: "It has been known for many years that marked disturbances of the thyroid gland cause sterility, and the possibility that the milder alterations of that function may also effect the fecundity has been given scant attention."¹⁹ Fifty per cent of his infertile patients had a basal metabolic rate of -10 or less. Of those treated with thyroid extract, 33 per cent became pregnant within a short time. He concluded that a normal basal metabolic rate is apparently essential for conception and normal gestation. Others have carried the work of Litzenberg much further, maintaining the need for, and value of, thyroid extract, in the treatment of infertility even when the basal metabolic rate, cholesterol, protein-bound iodine and I^{131} tests are within normal.

We must not forget, however, that we also have innumerable examples of pregnancy after adoption, wheat germ oil, tubal insufflation, bimanual examination, estrogen and the passage of more time. How are we to evaluate these results? It has been shown that, in the case of primary sterility, pregnancy followed within a year in about 17 per cent of patients, no matter what procedure was used.²³ In spite of the enthusiasm of many authors, there is still no convincing evidence that the euthyroid individual is benefitted by thyroid extract in the treatment of sterility. I know it is used by the ton, and one may say, "It can't do harm; why not use it?" Remember, it may suppress normal thyroid activity and actually may lead to hypothyroidism. In conclusion, then, we believe that thyroid extract probably is of no value in the treatment of sterility in the euthyroid patient. It is indicated in the treatment of infertility in the hypothyroid patient.

What about the effect of hyperthyroidism on fertility? Apparently mild degrees of hyperthyroidism do not interfere with conception. Pregnancy is best postponed until the thyroid problem is completely solved. Should the two conditions—pregnancy and hyperthyroidism—coexist, we encounter difficulties which will be discussed later.

The relationship of thyroid function and another facet of ovarian activity, menstruation, is not too clear. One of the most valuable contributions

to our understanding of this problem comes from the work of Benson and Dailey.³ In reviewing the clinical histories of 274 women with authenticated hyperthyroidism, they were able to follow not only the menstrual patterns associated with thyrotoxicosis, but also the pattern after these patients were treated. In some instances hypothyroidism followed, then they were able to observe the effects of hyperthyroid and hypothyroid function on menstruation in the same patient.

From this report, we learn that 50 per cent of women with mild toxic diffuse goiter and 74 per cent with severe cases, experienced a decrease in amount and duration of the menstrual flow, while only 5.7 per cent (mild) and 7 per cent (severe) noted an increase and 44 per cent (mild) and 18 per cent (severe) failed to observe any change at all. This observation is important, because throughout the years it has often been stated that hyperthyroidism leads to increased menstrual flow. Not so, apparently, but rather a decrease or no change at all. Amenorrhea occurred in less than 5 per cent of patients, but where it did occur, the patients were quite toxic, and all patients with amenorrhea suffered unequivocal exophthalmos.

Turning to thirty-one patients who developed hypothyroidism after the treatment of toxic diffuse goiter, we learn that *eighteen developed menorrhagia or polymenorrhea*. The menstrual history in the thirteen remaining patients did not change from their pretreatment normal. The administration of thyroid extract to these hypothyroid bleeding women led to prompt resumption of a normal cycle in twelve out of fourteen patients.

Experiments with monkeys also indicate that a relationship does exist between the thyroids and gonads. Engel⁹ noted that amenorrhea occurred in hypothyroid monkeys. Following thyroidectomy, a single period of treatment with thyroid extract would induce normal menstruation for several cycles.

To summarize, hyperthyroidism is most likely to be associated with a decrease in menstrual flow—although there may be no change in menses at all, while true hypothyroidism is often associated with increased bleeding. But what about the patient with subclinical or very mild degrees of hypothyroidism or hyperthyroidism? Might not she, too, manifest menstrual abnormalities? We have no reason to believe so. The subclinical states are still theoretical.

At this point I would like to discuss the relation-

ship of abnormal thyroid function and pregnancy in the human. Here we may ask a series of questions which will focus attention on the major problems. First let us consider hypofunction.

1. What is the effect of *hypothyroidism on pregnancy*? We have seen that fertility is decreased with hypothyroidism of moderate degree, but pregnancy does occur.^{14,18,20} If achieved, hypothyroidism may lead to abortion or premature labor. Generally, true hypothyroid states are recognized and treated prior to conception. Obviously, therapy, which consists of thyroid extract, should be maintained throughout pregnancy.

2. What effect will *hypothyroidism have upon the fetus*? Apparently none, assuming that the degree of hypothyroidism is not sufficient to interrupt gestation.

3. What effect will *thyroid therapy have upon the fetus*? Again, apparently none, although we know that the placenta is permeable to thyroid hormone.²¹ If there is suppression of endogenous activity of the fetal thyroid—which activity can be recognized as early as the twelfth week of gestation^{6,13} the suppression is transitory and not recognizable by ordinary means.

4. What effect does the *fetal thyroid have upon maternal hypothyroidism*? If the mother is taking thyroid extract, the effect of fetal activity would be difficult to recognize. If the mother is not on therapy, pregnancy would be unusual in severe cases. In mild cases, presumably fetal activity could ameliorate the symptoms.

5. *How do we treat hypothyroidism during pregnancy*? Just as we would treat hypothyroidism in the non-pregnant woman. In true hypothyroidism, small doses of 1/2 to 2 gr. of desiccated extract daily usually suffice.

Turning to hyperthyroidism and pregnancy, we can ask pretty much the same question, but the answers are not quite as simple.

1. What is the effect of *hyperthyroidism on pregnancy*? Severe hyperthyroidism leads to infertility, abortion and premature labor, but not to toxemia or post partum hemorrhage, as once taught. If adequately treated, however, pregnancy occurs and proceeds normally.

2. What effect will *hyperthyroidism have upon the fetus*? There is no evidence that hyperthyroidism *per se* causes fetal abnormalities (other than problems already mentioned).

3. What effect will the *treatment of hyperthyroidism have on the fetus?* The answer to this question will depend upon the therapy used, the stage of gestation and the severity of the disease. Answers to this question will be delayed until therapy is discussed.

4. What effect does the *fetal thyroid have upon maternal hyperthyroidism?* Apparently none. Hyperthyroidism generally progresses in severity so any exacerbation might well be coincidental.

5. *How do we treat hyperthyroidism?* Obviously, if recognized before conception, it should be treated at that time. Mild degrees of hyperthyroidism may be particularly difficult to recognize, especially if the patient manifests anxiety. In addition, we must remember that pregnancy increases both the basal metabolic rate and protein bound iodine.

The non-pregnant hyperthyroid patient is well served by several orthodox therapies; long-term use of antithyroid drugs, radioactive iodine or surgery after adequate preparation. Each therapy has its own staunch supporters, with most experts less enthusiastic about I^{131} in the younger patient. The reason for this still rests on the unknown long-range harmful effects of internal radiation on the body and genes, although I^{131} has now been used for fifteen years without a single instance of serious adverse developments.

With the pregnant patient, the problem is quite different. Basically, thyrotoxicosis must be controlled, but in such a manner as to avoid injury to the fetus. Both the antithyroid drugs and I^{131} cross the placenta. While short term therapy with antithyroid drugs does not harm the baby, long term therapy may lead to goiter of the newborn.¹ Even if the swelling is only transitory, it seems best to avoid any medication which may affect the future health of the child. Hence, during pregnancy thiouracil and its related compounds are not desirable except for preoperative preparation for subtotal thyroidectomy.

Radioactive iodine is contraindicated. It readily crosses the placenta and we know it may be absorbed by the fetus as early as the twelfth week of gestation. It has been shown to cause cretinism in the experimental animal.²⁴

Surgery can be performed during pregnancy without much difficulty.²² Most patients can be adequately prepared by the use of iodine alone. Some few will also need an antithyroid drug.² But we must not get the idea that all patients who

are pregnant must be operated upon—at least not while they are pregnant. Some patients will do well on ordinary iodine alone and may be carried through childbirth. Afterward one may elect to use I^{131} rather than to operate. The severity of symptoms, duration of gestation, and response to therapy will greatly determine the ultimate recommendation.

In summary, then, we shall aim to carry the patient medically until after delivery. If this cannot be done safely, subtotal thyroidectomy will be performed during pregnancy after adequate preparation.

One final question remains to be asked. What effect does pregnancy save upon the genesis of hyperthyroidism or upon the course of the disease? We all have observed the onset of hyperthyroidism during pregnancy or shortly after childbirth. There does seem to be some relationship, but it still remains obscure. The course of the disease, however, is not affected by pregnancy. As already mentioned, hyperthyroidism is usually a progressive disease; the pregnancy is incidental. Certainly, the effect of pregnancy is no longer considered serious enough to warrant interruption.

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Evaluation of Chlorpromazine and Reserpine in Intensive Treatment of Chronic Psychotic Patients

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EVEN THOUGH there have been notable changes wrought by chlorpromazine and reserpine in the mentally disturbed, the limitations of the recovery process have become more prominent when one reviews each new report.

How completely one can bring about the recovery of a chronically ill patient, and how much that complete recovery is aided by hospital personnel, are questions still not satisfactorily answered.

Hollister, et al,¹ noted in their study that "both drugs, reserpine and chlorpromazine, have been equally effective in the most difficult group of patients. It should be emphasized that it is the practice to continue other forms of treatment while the patients are treated with drugs. Thus, these results represent more than the effects of the drug alone."

Bleuler and Stoll² asked the question, "Are treatments with chlorpromazine and reserpine as effective as the older therapies in improving, socializing and, in cases of curable schizophrenia, accelerating and creating readiness for contact and psychotherapy?"

It was not our purpose at first to attempt to answer these important questions. For the past year we have been measuring the therapeutic effects of reserpine and chlorpromazine, like so many other hospitals and research centers throughout the country. Due to an interruption in our drug supply, we had a chance to note that even minimal doses of the drugs seemed to have affected the over-all therapeutic atmosphere of our chronic treatment building.

By evaluating the year's results, we hoped to find the answers to several questions. Did these drugs change the interaction between personnel and patients, thereby improving the milieu therapy, or did these drugs make the patient more acces-

sible to milieu therapy? Which was more effective in treating chronic patients, reserpine or chlorpromazine? Which gave the greater degree of change? Did auxiliary therapies—electroconvulsive therapy and group therapy—help bring about a greater improvement? What revision in the treatment regime for chronic patients had been suggested by the results from the study?

Kovitz³ found improvement in 53 per cent of cases of severe chronic schizophrenics treated with reserpine, in 58 per cent of such cases treated with chlorpromazine and in 24 per cent of similar cases treated with placebos.

In a public institution matters of cost are of importance. Results with such apparent similarity would cause one to ask why use a more expensive medication? We therefore examined the degree and quality of the improvement brought about by the two drugs.

Ford and Jameson⁴ found chlorpromazine in conjunction with electroconvulsive therapy shortened the course of treatment. When used on treatment failures, a notable percentage recovered sufficiently to be discharged home. Chlorpromazine appeared to be both an adjunct and a last ditch measure. Would it play a similar role in our treatment program?

TABLE I. DIAGNOSIS IN 285 SUBJECTS

Diagnosis	Number
Schizophrenia	245
Chronic brain syndrome	32
Manic depressives	4
Involuntal psychotic reaction	4
Total—	285

Subjects

Those in the study consisted of 285 chronically ill women of various diagnoses, white and colored, ranging in age from twenty to sixty. Duration of hospital stay was from one to fifteen years. Two hundred forty-five were diagnosed schizophrenia, thirty-two chronic brain syndrome, four manic-depressive psychosis, and four involuntal psychotic reaction.

From the Psychiatric Division, Wayne County General Hospital—J. A. Belisle, Acting Clinical Director, S. B. Jenkins, Assistant Psychiatrist, J. E. Carson, Psychiatric Resident.

One hundred seven received chlorpromazine and auxiliary therapy.

Fifty-three received reserpine and auxiliary therapy.

The chlorpromazine group consisted of 104 schizophrenics, one mental defective and two manic depressives, totaling 107. Patients receiving as little as 600 milligrams of chlorpromazine were included.

TABLE II. SUBJECTS TREATED WITH CHLORPROMAZINE AND OTHER THERAPIES

Diagnosis	Number
Schizophrenia	104
Chronic brain syndrome—Mental deficiency	1
Manic depressives	2
Involuntal psychotic reaction	0
Total—	107

The reserpine group contained forty-nine schizophrenics and four diagnosed chronic brain syndrome.

TABLE III. SUBJECTS TREATED WITH RESERPINE AND OTHER THERAPIES

Diagnosis	Number
Schizophrenia	49
Chronic brain syndrome	4
Total—	53

The controls numbered 135 and contained all the patients receiving no chlorpromazine, reserpine, electroconvulsive therapy or group therapy. They received milieu therapy, which consisted of occupational therapy, recreational therapy and custodial care.

Method

Everyone was rated according to his recorded and observed behavior for the three-month period prior to the beginning of treatment. For the month following a year of treatment, another rating was made. Any change in rating could be observed quantitatively by subtracting one from the other. Table IV gives the scale used.

TABLE IV. RATING SCALE

1. Convalescent leave
2. Ground privileges or home visits every week
3. Adequate ward adjustment. Occasional visits (monthly)
4. Combative or untidy or withdrawn up to half of time
5. Combative or untidy or withdrawn over half of time

Several treatment categories were devised which contained combinations of the available therapies. To secure results for a group receiving what was

surmised from the literature to be a minimal therapeutic trial, a category of chlorpromazine, 20,000 milligrams or more, was evolved.

TABLE V. THERAPY CATEGORIES

Type	Number
A. Chlorpromazine and auxiliary therapy	107
B. Reserpine and auxiliary therapy	53
C. Chlorpromazine alone	52
D. Chlorpromazine and reserpine alone	9
E. Chlorpromazine and group therapy	16
F. Reserpine and group therapy	8
G. Chlorpromazine and electroconvulsive therapy	3
H. Reserpine and electroconvulsive therapy	2
I. Chlorpromazine, ECT, and group therapy	4
J. Reserpine, chlorpromazine, ECT, and group therapy	7
K. Control group	135
L. Chlorpromazine, reserpine and ECT	2
M. Reserpine alone	15
N. Chlorpromazine 20,000 mg. or more, other therapy	49
O. Chlorpromazine 20,000 mg. or more alone	21

These groups were compared as to over-all improvement, quantitative improvement in behavior and degree of improvement. All patients that moved from one behavior category to a category considered better were recorded as improved no matter how many categories advanced.

The quantitative improvement was computed by averaging the betterment and worsening of behavior for each individual in a therapy combination. An improvement of two points meant an advance of two behavior categories. Since the majority of the patients were in group III, an advance of two points would have meant the obtainment of convalescent leave. This was the ideal for which we hoped. The quantitative rating showed which therapy combination came the closest to the ideal two point improvement.

The degree of improvement was determined by computing the percentage of patients in each treatment combination that advanced the hoped for two points or more.

The improvement in group V patients for combinations containing chlorpromazine and reserpine, and for the control was computed.

TABLE VI. CONVALESCENT LEAVE
(April, 1955 to April, 1956)

Due to or aided by chlorpromazine	15
Due to or aided by reserpine	1
On neither drug	7
Total—	23

Results

There were twenty-three convalescent leaves issued. In fifteen, chlorpromazine had played a prominent part in their recovery and extramural adjustment. Four were not in psychiatric remission but either they were able to tolerate their

environment better or their friends, relatives and acquaintances found their behavior more acceptable.

The over-all improvement computed showed that about one-third of the controls improved in behavior. The change brought about by chlorpromazine was less than that of reserpine. Both showed more improvement than would have been expected from chance. When the chlorpromazine result was limited to only those receiving 20,000 mg. or more, the improvement brought about was significantly higher than that from reserpine.

TABLE VII. PERCENTAGE OF OVER-ALL IMPROVEMENT

Category	Number	Percentage of Category
K. Control	46	34.8
A. Chlorpromazine and auxiliary therapy	60	56.1
B. Reserpine and auxiliary therapy	38	71.7
C. Chlorpromazine alone	26	50.0
M. Reserpine alone	9	60.0
N. Chlorpromazine 20,000 mg. or more and other therapies	40	81.6
O. Chlorpromazine 20,000 mg. alone	16	76.2

This pattern continued when quantitative improvement was determined. The difference between the two therapies was more marked when larger amounts of chlorpromazine were used. The chart shows that auxiliary therapies contributed to the quantitative improvement but not enough to allow two point improvement.

TABLE VIII. QUANTITATIVE IMPROVEMENT IN BEHAVIOR

Category	Number	Average Point Improvement
A. Chlorpromazine and auxiliary therapy	107	.97
K. Control	135	.38
B. Reserpine and auxiliary therapy	53	.96
C. Chlorpromazine alone	52	.75
M. Reserpine alone	15	.80
D. Chlorpromazine and reserpine alone	9	.55
E. Chlorpromazine and group therapy	16	1.19
F. Reserpine and group therapy	11	1.22
J. Chlorpromazine, ECT, group, reserpine	7	1.29
N. Chlorpromazine 20,000 mg. or more and auxiliary therapy	49	1.29
O. Chlorpromazine 20,000 mg. or more alone	21	1.14

Table IX shows that chlorpromazine is three times as effective as reserpine in bringing about two-point improvement. The findings indicated that group therapy and electroconvulsive therapy were valuable adjuncts in bringing about sought for degree of improvement.

The Group V controls show a high percentage of improvement. That particular rating is affected by not only the behavior of the patient but also by the response of the hospital personnel. If the patient were either assaultive or withdrawn,

TABLE IX. PATIENTS ADVANCING TWO POSITIONS OR MORE IN RATING

Category	Number	Percentage of Category
K. Control	7	5.2
A. Chlorpromazine and auxiliary therapy	27	25.2
C. Chlorpromazine alone	10	19.2
B. Reserpine and auxiliary therapy	12	22.6
M. Reserpine alone	1	6.7
G. Chlorpromazine and electroconvulsive therapy	2	66.7
E. Chlorpromazine and group therapy	5	31.3
I. Chlorpromazine, ECT and group therapy	3	75.0
D. Chlorpromazine and reserpine	0	00.0
N. Chlorpromazine 20,000 mg. and auxiliary therapy	6	28.6

he was restrained or ignored. More patient, positive contacts with a less apprehensive employee allowed an improvement in rating.

TABLE X. PATIENTS IN GROUP V

Category	Number	Improved	Per Cent
K. Control	18	12	66.7
A. Chlorpromazine and auxiliary therapy	22	18	81.8
C. Chlorpromazine alone	11	9	81.8
O. Chlorpromazine, 20,000 mg. or more alone	6	4	66.7
B. Reserpine and auxiliary therapy	13	12	92.3
M. Reserpine alone	5	3	60.0
Total Group V	44	30	68.1

Complete blood counts were taken and recorded for seventy of the patients receiving chlorpromazine. These showed that at least ten per cent of the patients showed depressions of the white blood count. There were no serious clinical manifestations.

TABLE XI. EVALUATION OF WHITE BLOOD COUNTS

Group	Number	Percentage
Counts before and after chlorpromazine	70	100.0
Depression of more than 2,000	8	11.4
Counts below 4,000 at end of treatment	4	5.7
Elevation of more than 2,000	6	8.5

Medical complications were seen in seven patients. Five broke out in rashes, one developed a Parkinson-like condition which reversed itself rapidly when the drug was discontinued, and one developed convulsions which were spaced about a month apart. These were easily controlled by small doses of dilantin.

TABLE XII. COMPLICATIONS (CHLORPROMAZINE)

Type	Number	Percentage
Rash	5	4.7
Parkinsonism	1	0.9
Jaundice	0	0.0
Convulsions	1	0.9
Total	7	6.5

Discussion

Our results seem to support the findings of Kovitz³ as to the relative effectiveness of both drugs. But like Kinross-Wright⁵ we found chlorpromazine to be significantly more effective when used in high doses.

The ability of a drug to bring about a quantitatively greater degree of improvement is of primary importance in reducing inpatient treatment in public hospitals. Our results seem to indicate that these drugs both change the interaction between patient and personnel, enhancing milieu therapy and the patient's accessibility to milieu therapy. The improvement of almost one-half point in the control group indicates that the milieu therapy does bring about some improvement. Since our results show two-thirds of the Group V improving, we can envision a more subdued, communicative and social atmosphere. This would allow milieu therapy, group and individual psychotherapy to be brought into play more effectively.

We have found that catatonics after treatment with electroconvulsive therapy can be kept from relapsing by being placed on reserpine. Chronically ill patients are showing more lasting improvement to electroconvulsive therapy when this is combined with chlorpromazine. Two patients advance from Group V to convalescent leave on chlorpromazine. This did not happen on reserpine.

With these results, more social contact between patients and personnel is inevitable. In the absence of sufficient individuals trained in developing positive interpersonal relationships, attendant personnel should be trained to do this.

Milieu therapy must be administered swiftly, intensely and persistently as soon as the patient shows some response in order to maintain the contact with reality and to enhance his recovery.

Our patients have been in the hospital an average of six years. We have found it necessary gradually to reacquaint the improved patient with extramural environment. More "half-way houses" become urgent. There a patient could gradually get on his feet while still maintaining some of his dependent ties with the hospital.

While checking white blood counts, it was noted

that those that had depressed white blood counts showed a notable rise in their counts following a short course of electroconvulsive therapy.

Conclusions

1. On all dosage levels we found no significant differences between the effectiveness of reserpine and chlorpromazine.
2. When more than 20,000 milligrams of chlorpromazine were used, not only was there greater improvement but also the degree of improvement was quantitatively larger.
3. Milieu therapy had a measurable effect upon chronically ill patients, aiding their recovery.
4. Improvement was greater when both drugs were used with auxiliary therapies.
5. The use of drug therapy created an atmosphere that allowed improvement of severely regressed patients who had received none of the drugs.
6. None of the therapies brought about sought for "two point" improvement in the majority of patients.
7. The percentage of patients treated with chlorpromazine advancing two points was significantly higher than the percentage of those treated with reserpine.

Summary

Two hundred eighty-five, white and colored, female, chronically ill psychotics were treated with drug, electroconvulsive, group and milieu therapy. The results were analyzed to determine the percentage and the magnitude of improvement.

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The General Practitioner in Chronic Disease and Disability in Industry

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IN CONSIDERING his rôle in the prevention and amelioration of chronic disease and disability in industry, the general practitioner cannot but sense an awesome responsibility. The chronic ailments have greater social and economic import than any other disease category. This is borne out by the fact that about 60 per cent of all days of disability is accounted for by chronic illness⁷ and that approximately seven-tenths of all deaths are caused by chronic illness. We know that, contrary to popular belief, chronic disease strikes during man's productive years. Thus, one case out of every five involves a person under twenty-five, and one out of every two involves a person under forty-five. Chronic diseases are estimated to cause three-fourths of a billion days of lost time each year.⁷

Since it is the private physician who sees the majority of cases of chronic disease and disabling accidents—both home and industrial, it is basically his responsibility to observe and recognize those conditions which lead to disability and to attempt to arrest their progress or mitigate their effects. This tremendous burden on the private physician can be eased by his utilizing the resources available in the community and in industry for the early detection, management, and, where necessary, rehabilitation in chronic disease and disability. These aids are available to him, in greater or lesser degree, in four major areas: (1) the prevention of occupational exposures which may lead to chronic disease; (2) the proper placement of workers to avoid the aggravation of existing chronic diseases; (3) the provision of preventive health services in industry for early detection and diagnosis; and (4) the rehabilitation and restoration of the disabled patient to as productive and full a life as possible.

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Prevention of Occupational Chronic Diseases

Let us first consider the chronic diseases known to be associated with specific occupational exposures. These include various types of cancer, diseases of the respiratory tract, diseases of the cardiovascular system, and a large variety of chronic poisonings or the resultant chronic disability from acute poisonings.

Cancerigenic exposures are found in diversified occupations. Thus, the processing of chromates has been associated with a many-fold increase in the incidence of primary lung cancer. Ionizing radiation from radon and its decay products has been implicated in the extraordinarily high lung cancer rates among European uranium miners. In addition, ionizing radiation may be an etiologic factor in leukemia and skin cancer; bone sarcoma has also been related to deposition of radium. Bladder cancers have been conclusively related to beta naphthylamine and to benzidine exposure. Arsenic and some of its compounds, as well as a variety of fractions of petroleum, coal tar, and pitch have been implicated as causing skin cancers. Finally, cancer may complicate other occupational diseases; for example, lung cancer is suspected of being secondary to asbestosis.

Respiratory diseases have been frequently associated with the occupation. This disease group includes silicosis, silicotuberculosis, asbestosis, and other pneumoconioses, and bagassosis.

Diseases of the cardiovascular system directly traceable to the working environment are few. Thus, disabling cor pulmonale may accompany severe pneumoconiosis and chronic beryllium disease. Also, damage to the peripheral vascular system may result from the prolonged use of vibrating tools and from exposure to low temperatures.

Chronic effects are also associated with exposure to heavy metal poisons in industry. In this category, lead poisoning was the classic example. Although disabling chronic industrial lead poisoning is no longer a major disease problem, oppor-

tunities for exposure are widespread, temporary overexposure is frequent, and only by great vigilance can anemia, peripheral neuritis, and encephalopathy be prevented. Organic damage to the nervous system may result not only from lead exposure but also from arsenic or mercury and its compounds.

Cirrhosis of the liver can result from carbon tetrachloride exposure, as well as exposure to the chlorinated naphthalenes and diphenyls. Chronic anemia from benzol is well recognized. Indeed, in searching for the etiology of chronic disabilities of the liver, kidneys, nervous system, and hemopoietic systems particularly, the possibility of chronic or subacute poisoning should never be overlooked.

Chronic dermatoses can be caused by numerous irritant or sensitizing agents encountered occupationally. Because of their widespread occurrence, frequency, and duration, industrial dermatoses are of special importance to the general practitioner. Often a worker who becomes sensitized to a particular substance, usually a chemical, may retain this sensitivity long after he has left that specific working environment.² For this reason, in cases of chronic dermatitis, first consideration should be given to the patient's occupational history in attempting to establish the cause.

These examples serve only to illustrate the wide variety of chronic diseases that may have their origin in occupational exposures. Should the general practitioner suspect that the patient's job may be the cause of certain symptoms, he can turn to the industrial physician for expert consultation. The industrial physician, with his intimate knowledge of the materials and processes used in the plant, frequently is able to provide readily the information needed for a differential diagnosis. His information may either confirm the occupational disease diagnosis or lead the private physician to look elsewhere for the cause. A quick check with him can save the busy general practitioner much time and effort. For example, an automobile spray painter who is losing weight and developing a pallor may conceivably be suffering from lead poisoning. Consultation with the industrial physician, however, might reveal that the paint with which the patient is working contains no lead. Ruling out lead poisoning, one might determine that the patient has a primary anemia of nonoccupational origin.

If a particular plant does not have an indus-

trial physician, the general practitioner may call upon the official occupational health agency in his State to help establish the nature of the materials and conditions to which his patient is exposed. By availing himself of the services of his official agency, the physician is not only enabled to diagnose with greater certainty the patient's condition, but may also be instrumental in preventing other workers from being similarly affected.

Placement of Workers

The general practitioner's co-operative bonds with the industrial physician extend beyond the diagnosis of occupationally related chronic diseases and encompasses other aspects of the total chronic diseases problem. A particular opportunity for mutual helpfulness is presented by the preplacement examination.

In general, there is no great difficulty about such non-disqualifying ailments as infected tonsils and ailments causing temporary disqualifications, such as hernia. Both are referred to the private physician for correction. Problems exist, however, where more severe permanent disabling conditions are involved. Such a situation calls for complete agreement by the industrial physician and the individual's personal physician. In cases of epilepsy or serious heart disease, for example, the family physician upon request should make known to the industrial physician his opinion of the patient's physical condition and prognosis. It then becomes the industrial physician's responsibility to recommend proper placement of the applicant in a position which will not aggravate his disease state or constitute a hazard to himself or his fellow employees.

Differences of opinion can be resolved by full, free exchange of information on the part of both physicians, based upon recognition and respect of each other's knowledge and scope of responsibility. Mutual respect is built on the premise that the general practitioner knows far more about the applicant's medical history and physical condition, while the industrial physician knows far more about the physical requirements of the job and the working environment.⁶

Detection of Chronic Disease

In the detection of chronic disease, the general practitioner may again look upon the industrial physician as a valuable ally. An opportunity for productive co-operation is afforded by the periodic

examination, screening tests, and by visits made by the worker to the plant medical department. Observing the worker at these times, the alert industrial physician frequently recognizes chronic disease in its incipient stages and refers the worker to you for treatment. This type of co-operation holds great promise for minimizing the disability from chronic diseases.

The significance of the early detection of chronic disease through periodic examinations in industry, with prompt referral to the private physician before irreparable harm is done, is illustrated in the following report of Dr. E. P. Luongo⁵ of the General Petroleum Corporation:

By regular examination, healthy employes are reassured against doubts as to their physical condition and hypochondriasis is reduced. Through advice given to employes regarding physical defects which may be found, employes are assisted in maintaining their health. The impact of disabling organic disease is reduced by early detection, and employes are encouraged to seek treatment from their private physicians before irreparable harm is done.

In General Petroleum, the following has been experienced, with due consideration given to other influencing factors including age of employe population:

1. The incidence of disabling and fatal cardiovascular heart disease has been decreased 15 per cent since 1948.
2. There have been no disabling consequences among diabetics since 1950.
3. The incidence of overweight has been reduced from 25 per cent of employe population in 1951 to 15 per cent of employe population in 1954.
4. Mortality from malignant lesions of internal organs in male patients has dropped 33 per cent since 1948.
5. Disabling diseases of the digestive tract have dropped 20 per cent from 1948 to 1954.
6. In female patients, the mortality from breast and pelvic malignant disease has decreased 50 per cent since 1948.

Where industrial health services are not available, health departments, together with voluntary agencies, in a few places are conducting so-called multiphasic screening examinations of employed groups. Since screening tests are designed to cull from an apparently healthy population those individuals with incipient disease, such tests result in substantial numbers of referrals to the private physicians. It is in the private physician's office, however, where the synthesis of the art and science of medicine establishes a definite diagnosis of disease or its absence.

The health education activities of official health agencies, the publicity campaigns of voluntary

health associations, and the health literature of insurance companies and other agencies likewise serve to alert many individuals who may be harboring the seeds of a chronic disease. All of these are sources of assistance to the doctor in the early detection of chronic disease. Through industrial periodic physical examinations and health counselling, and through community screening procedures and educational activities, the patient is not only guided early to the private physician for any necessary care but in many instances is also emotionally prepared for the diagnosis of a chronic disease.

It must not be overlooked, however, that, while these aids have an important place, their scope and impact are limited. Thus, by far the most direct and far-reaching contributions to adult health maintenance must come from the private physicians, in their day-to-day contacts with their patients. There is no substitute for repeated counselling and reminder to patients to discard bad health practices, to adopt healthful habits, and to report to the physician at regular intervals or upon the development of any unusual symptoms.

Rehabilitation and Restoration

Once a chronic disability has been diagnosed, medical rehabilitation should start immediately and continue as long as the patient can benefit from such services. Various types of specialized assistance are required, depending on the disability. The wide range of supportive personnel includes medical social workers, medical specialists such as physiatrists and psychiatrists, physical and occupational therapists, public health nurses, and welfare workers. All of these specialized personnel have some contribution to make to the solution of the varied health and social problems of the individual. It is the responsibility of the general practitioner and the industrial physician to utilize fully the available professional resources of the community that must make up the rehabilitation team.

The key role of the general practitioner is apparent from the outset when the diagnosis is first made. Because of his relationship with the patient, he is in the position to captain the team most effectively, to guide the therapy, and to make the necessary interpretations to the patient and family. It has been amply demonstrated, for example, that many persons with heart disease are able to continue to perform a wide variety of jobs

with no adverse effects. Motivation, anxiety, taboos, and prejudices play as great a part in the disability as the type of work to be done.³ Thus, in the case of a myocardial infarct, the problem of cardiac neurosis is well known. The private physician can avert such a complication by starting psychotherapy soon after the infarct, while the patient is still convalescing.

The American Heart Association¹ has reported that "under no circumstances should the patient be told that he can never again do regular work," and that although the young patient having cardiac disease usually can cope with changes in his environment, "drastic reorganization of the life of an elderly cardiac is emotionally undesirable; return to the same job on a limited basis is preferable to a marked change in occupation or attempts to learn a new skill."

In determining what job the cardiac patient can safely perform within his actual limitations, the private physician can turn for assistance to work evaluation clinics now being developed in many localities. If none exists in his area, the private physician, in consultation with the industrial physician and a vocational counsellor, may judiciously have to prescribe a job trial to truly evaluate the patient's work capacity, as recently described by Dr. John J. Thorpe of the New York University-Bellevue Post Graduate Medical School.⁸ In any case, the patient's entire physical activity during a twenty-four-hour period should be evaluated, with emphasis placed on frequent follow-up examinations to determine the influence of his total activities upon his cardiac status.⁴ The American Heart Association makes available to all physicians various publications which serve as guides in the evaluation of physical capacity and as a reference to existing community resources which may be utilized.

Another major area of disability involves mental health and emotional problems. The physician may expect to find himself increasingly concerned with such problems among workers. It has been estimated that about 25 per cent of the nation's labor force suffer from some form of emotional disturbance. Whether these disturbances have their roots in the job situation or not, the private physician can achieve a greater insight into his patient's difficulties by working closely with the industrial physician. Co-operation of this type is particularly important if it is suspected that the

job is contributing significantly to the emotional disturbance. If there is no industrial physician in the patient's place of employment, the private physician will need to consult with the supervisor or an appropriate management representative to help resolve the difficulties that may be causing the disorder. In addition, many communities are developing specialized mental health clinics and facilities which can be of great service to you in the management of these cases.

According to Dr. Ralph T. Collins, chairman of the Committee on Industrial Psychiatry of the American Psychiatric Association, in the care of neuropsychiatric cases, anxiety causes the greatest problems. He advises that patients with mild neuropsychiatric conditions stay on the job. Dr. Collins further reports that patients with acute schizophrenic reactions frequently recover in ten to twelve weeks, and that returning them to their job is important in their rehabilitation.⁸

The rehabilitative aspects of such other chronic diseases as vascular lesions affecting the central nervous systems, arthritis, neuromuscular disorder, and diabetes are equally important in preventing the progression of these diseases and in helping the patients learn to live and, where possible, to work with their handicaps and disabilities.

In a number of communities, a broad variety of rehabilitative services are available for the patient in the home as well as in the hospital. These services are provided by what are known as "home care programs." Some of these programs are hospital based and represent an extension of the hospital service into the community. Other similar programs have been developed in official and voluntary health agencies. Experience has shown that home care is not a substitute for hospital care. However, home care programs fill a real need for medical service in a surprisingly large percentage of long-term cases, especially those requiring specialized treatment. In the handling of patients with long-term illness or disability, home care can be as helpful to the general practitioner as hospital care. The development and use of this new technique may well be one of the more important health service developments of the past several years.

Since restoration of the patient as nearly as possible to economic independence is the ultimate

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ACTH and Cortisone in Trichinosis

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TRICHINOSIS is a common but rarely recognized infection in the United States. Autopsy studies show that up to 30 per cent of the population is infected,¹ but symptoms are manifested in only 5 per cent of cases. There is no known curative agent and up till recently it was not possible to alter the natural course of the illness which may be prolonged for many weeks and had a mortality varying between 5 to 30 per cent. However, treatment with ACTH and cortisone has markedly altered the picture. It is now possible to obtain complete symptomatic relief within forty-eight hours and so far no deaths have been reported in patients receiving steroid therapy. Although these drugs have been freely available for eight years, only seventeen cases of trichinosis treated by steroid therapy have been reported²⁻¹¹ in the American and Canadian literature. Review of the foreign literature discloses a further twelve cases,¹²⁻¹⁴ giving a total of twenty-nine cases in all. In every case there has been a dramatic symptomatic response. Three further cases are reported here.

Case Reports

Case 1.—P.B., a forty-five-year-old Hungarian man, was admitted on December 25, 1955. Nine days prior to admission he had diarrhea for three days, following which he became constipated. For six days previous to admission he had fever with shaking chills, during which time he had been given penicillin and streptomycin without effect. His past history was noncontributory. At the time of admission he complained of fever, malaise and constipation. His temperature was 103.6 F. and his pulse 100/min. There were no abnormal physical signs. Laboratory investigations showed: Hemoglobin 14.2 grams; red blood count 4.86 million; white blood count 9,400, 86 per cent polymorphonuclears, 4 per cent eosinophils; Urine: albumin trace, 6 to 8 leukocytes, otherwise normal. Three blood cultures as well as urine and stool cultures were negative. Liver function tests showed: Thymol turbidity 3 units, thymol flocculation 1+, cephalin cholesterol negative, direct bilirubin 0.13 mg., total 0.63 mg.

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On the fifth hospital day his personality changed and he became antagonistic and complained constantly of feeling "crazy." At this time, he first developed muscle pain. A history was now obtained of his

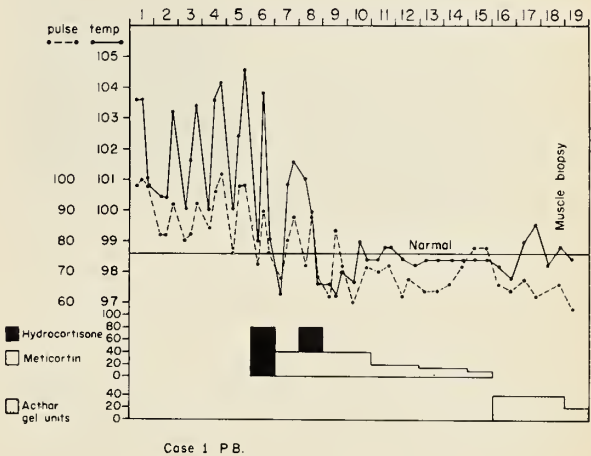


Fig. 1. Temperature chart of Case 1, showing the response to therapy.

having eaten uncooked bacon just prior to his present illness. Despite muscle pain, muscle tenderness was not a prominent feature at any stage. The only fresh abnormality found on physical examination was one small fundal hemorrhage. A trichinosis skin test gave a strongly positive immediate reaction. A repeat white blood count was 11,300, with 59 per cent polymorphonuclears and 16 per cent eosinophils. A diagnosis of trichinosis was made, and this was confirmed (on the eighteenth hospital day) by a biopsy of the deltoid muscle, which showed encysting larvae. On the sixth hospital day he was started on steroid therapy as shown in Figure 1. Within forty-eight hours his temperature was normal, and by the fourth day his muscle pains were gone. The personality change persisted up to the time of discharge, but cleared before he finally stopped steroid therapy. He was discharged after thirteen days of treatment to continue on Acthar Gel, 20 units a day for a total of six weeks. Two days after discharge, he was readmitted with a thrombosis of the left femoral vein which responded satisfactorily to routine anticoagulant therapy. The Acthar Gel was stopped, as intended, on February 4, 1956, with no subsequent relapse.

Case 2.—M.B., the thirty-two-year-old Hungarian wife of the patient in Case 1, was admitted to the hospital on December 31, 1955. Fifteen days prior to admission and within a few days of having eaten some

to admission, facial and periorbital edema developed, associated with pain in the muscles of the arms and legs. He also had eaten of the same uncooked bacon as his mother and father.

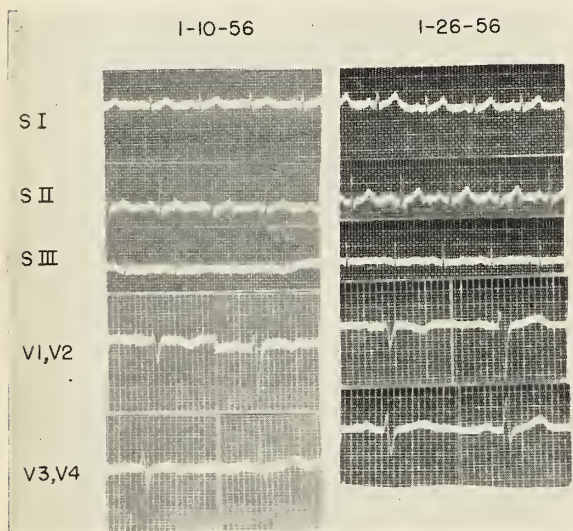


Fig. 2. Electrocardiographic changes in Case 2, showing the inversion of the T-wave in S III, V₂ and V₃, with return to normal in sixteen days.

uncooked bacon, she had a brief episode of diarrhea, followed by malaise. Eight days later, she noticed periorbital edema which spread rapidly to involve the whole face. Soon generalized muscle pains developed so that even breathing became painful. The day before admission, she had fever for the first time.

On physical examination her temperature was 100.4 F, pulse 76/min. She was lethargic, apprehensive and very emotional. Besides the facial swelling and muscle tenderness, it was noticed that the flexor muscles of the right forearm were swollen. The trichinosis skin test gave a strongly positive immediate reaction. The white blood count was 13,000, with 28 per cent eosinophils. On January 10, 1956, an electrocardiogram showed inversion of the T-waves in Standard lead 3 and in precordial leads V₁, V₂ and V₃. These changes persisted until January 26, 1956, when the electrocardiogram showed reversion of the above changes to normal (Fig. 2). In spite of the electrocardiographic evidence of myocardial involvement, the patient never exhibited any subjective evidence of myocarditis.

She was started on Acthar Gel, 40 units a day. There was a less dramatic response to treatment than in the first case, but she made steady improvement and at no time had a fever over 99.4 F. She did, however, remain very depressed for about three weeks, but this cleared before stopping the Acthar Gel, which therapy was maintained for a total of six weeks.

Case 3.—K.B., the fifteen-year-old son of the family, was admitted to the hospital on January 7, 1956. Twelve days previously, he had developed a continuous fever of up to 104.0 F. Three days prior

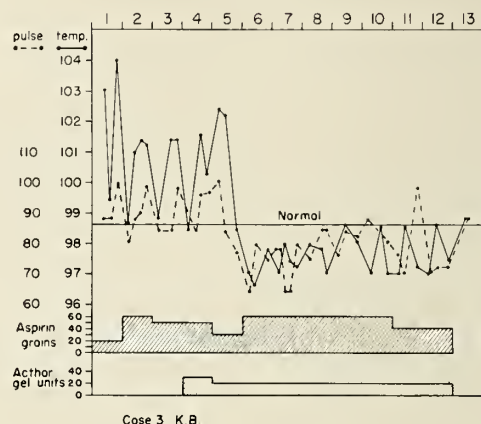


Fig. 3. Temperature chart in Case 3, showing the response to therapy.

On physical examination, his temperature was 103.0 F. and the pulse 88/min. He was a well developed boy with marked swelling of the face and considerable tenderness of the limb muscles. There was a small hemorrhage in the left fundus. The trichinosis skin test gave a strongly positive immediate reaction. White blood count was 17,300, with 27 per cent eosinophils.

For the first three days, he was treated with aspirin, 20 to 60 gm. per day, and Benadryl,® 50 mg. three times daily in order to compare such a regime with steroid therapy, but he had no relief of his symptoms nor of his temperature. On the fourth hospital day, he was therefore started on Acthar Gel, 20 to 40 units daily, with a prompt and sustained improvement in his condition (Fig. 3). He was discharged on the thirteenth hospital day, but continued on Acthar Gel 20 units daily, for a total of six weeks. His convalescence was uneventful.

Infection with the *Trichinella spiralis* occurs as the result of eating improperly cooked pork, although rare cases have occurred from eating bear and even walrus meat. The disease has three stages. The first is due to invasion of the intestinal wall by the female worm and is characterized by irritative gastrointestinal symptoms. After five days, the worm is so well embedded in the submucosa that purgatives will no longer dislodge her. The second stage lasts fourteen to twenty-one days as the larvae migrate from the intestine by way of the blood stream. Every organ is infected, but in particular, the striated and cardiac muscles and the brain. It is during this

period that symptoms are most prominent and the patient may present with a combination of fever, periorbital or facial edema, muscle pain and tenderness, encephalitis or psychosis. The final stage may be characterized by fatigue as the larvae encyst in the striated muscles.

The diagnosis was first suspected in these three cases as the result of being aware of the Hungarians' habit of eating uncooked meat. Muscle biopsy of the father confirmed the diagnosis. In the mother and the son the diagnosis was presumptive, but both had eaten the same uncooked bacon as the father, and both had the typical clinical features and showed the same response to therapy. The diagnosis of trichinosis is, therefore, felt to be safely established in these last two cases.

Discussion

These three cases, together with the twenty-nine cases reported previously, all showed a rapid response to cortisone and ACTH. These drugs have no parasitocidal effect and the mode of action is still undecided. Fortier⁹ suggests that they alter the host's defense mechanisms, in which case a change in the cellular reaction about the encysting larvae would be expected. Furthermore, the cyst wall, which represents a host reaction, also would be expected to show change under steroid therapy. Davis and Most⁶ did serial sections in one case of human infection and found a change in the inflammatory response, but this has not been confirmed by others, nor was it apparent in the muscle biopsy in the case reported here. Most observers agree that the symptoms and signs of this infection represent an allergic response on the part of the host and that these drugs merely modify this reaction.

Contrary to clinical experience, where the response to ACTH and cortisone has been invariably favorable, animal work shows that these drugs may be actually harmful in trichinosis. Coker¹⁵ showed that in mice infected with *Trichinella spiralis* and treated with cortisone, the adult worms lived longer and so produced more larvae. This may account for Stoner and Goodwin's¹⁶ finding that both these drugs increased the susceptibility of mice to this parasite. Luongo et al⁴ found that ACTH would protect infected guinea pigs while therapy was maintained, but if the onset of treatment was delayed the mice died despite ACTH. Although experimental work in animals does not

support the use of these drugs, in humans there is no doubt that if given in sufficient dosage, ACTH and cortisone are always effective in relieving symptoms.

A further reason for using ACTH and cortisone is that it probably protects the patient against the serious complication of myocarditis, which is the commonest cause of death in these patients. Although the larvae invade the myocardium, encystment does not normally take place. However, areas of focal necrosis and inflammation occur often proceeding to fatty degeneration, with death from myocardial failure resulting between the fourth to eighth week of the illness.¹⁷ Clinically, the only demonstrable evidence of myocardial involvement may be a change in the electrocardiogram. The commonest abnormalities are inversion of the T-wave or prolongation of the PR-interval or QRS-complex. On this basis, electrocardiographic evidence of myocarditis has been found in 21 to 75 per cent of patients. Whereas Solarz¹⁸ and Spink² found the highest incidence of electrocardiogram change in the second week of illness, Reiman (quoted by Solarz) found that the peak occurred in the fifth week. Of the thirty-two cases cited here, seven showed electrocardiographic evidence of myocarditis, one of whom developed congestive heart failure. This gives an incidence of 22 per cent.

The myocarditis in trichinosis is presumably a toxic reaction resulting from the destruction of the larvae within the myocardium. Because of their anti-inflammatory effect, ACTH and cortisone probably modify the myocarditis, although due to the complete lack of pathologic material in steroid treated cases, this must remain an assumption in the meanwhile. Nevertheless, there is considerable justification for maintaining therapy until the danger of myocarditis is past and, for this reason, six weeks would appear to be a minimum period during which these drugs should be given.

Summary

The literature is reviewed and three cases of trichinosis treated with ACTH or cortisone are reported. Twenty-nine similarly treated cases are cited from the literature. The mode of action of these drugs is briefly reviewed and the reason for maintaining therapy for at least six weeks is given.

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THE GENERAL PRACTITIONER IN CHRONIC DISEASE

(Continued from Page 866)

goal of rehabilitation, the private physician should be mindful of opportunities to help his patient become a productive member of society. One such opportunity is presented in his contacts with the owner-managers of business that he numbers among his patients. By allaying baseless fears on the part of the management group regarding the ability of persons with chronic diseases to work successfully in jobs for which they are physically and emotionally suited, the physician can further open the doors of industry to chronic disease patients. Such a contribution completes the cycle of medical and rehabilitative care which the private physician has provided and directed. Until the whole course of this cycle can be altered by the discovery of the causes and thus the primary prevention of chronic diseases, restoring the chronically disabled to useful productive lives, it affords the private physician his greatest satisfaction in a job well done in today's complex medical picture.

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Ecthyma Contagiosum (Orf) in Sheep and Man

A Summary of the Literature and Report of Three Cases

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ECTHYMA contagiosum in man is an acute vesicular and pustular disease acquired by contact with an infected sheep, goat or laboratory material. It is well known among sheep-raisers and veterinarians and in sheep-raising areas, rural physicians frequently see the disease. Since it is a self-limiting process and of a banal nature, it is probably more common than published reports would indicate. Many synonyms have been used to describe ecthyma contagiosum in sheep. Laymen are more familiar with the synonyms scabby mouth or sore mouth of sheep than with such terms as orf, contagious ecthyma, ovine pustular dermatitis or infectious pustular dermatitis of sheep. The disease is found in sheep-raising areas throughout the world.

Although it is not generally recognized, sheep-raising in Michigan appears to be steadily increasing. According to the 1954 census of the Department of Agriculture, there were approximately 675 sheep breeders with a total of more than 66,000 sheep in Washtenaw County alone.* It is evident from these figures that more than an academic interest in the disease is necessary among physicians in Michigan.

Ecthyma Contagiosum in Sheep

The infection in animals usually appears in the spring soon after the sheep are put to pasture. The usual sequence of events are that a few animals become infected from dried crusts which have remained scattered over the pasture from the previous year. The infection then is rapidly

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spread by way of contaminated feed or water or by direct spread, i.e., when an infected lamb suckles a ewe. Sheep of any age are highly susceptible and the process may quickly reach epidemic proportions. About three days following exposure, typical lesions begin to appear.²⁴ These may continue to appear for several days. The lesions occur on portions of the animal devoid of wool; namely, the gums, lips, nose, eyelids, teats and genitalia. The original papulovesicular eruption becomes pustular and ulceration occurs. The bases of the ulcerated areas become papillomatous and covered with heavy crusts. This produces swollen, painful lips and the typical "sore mouth."

The process is usually over in about three to four weeks. However, the infection is important from an economic standpoint because the animal fails to grow and gain weight properly. Although it is seldom fatal, if the disease is complicated by pyogenic organisms, screw worms or other parasites, the mortality rate may be very high.

In an attempt to protect the flock, many sheep-breeders vaccinate their lambs at about three weeks of age. The vaccine consists of one part of ground dried infected scab and one hundred parts of a diluent composed of fifty parts of glycerine and fifty parts of physiologic saline.³ Although vaccination results in an immunity sufficient to provide effective protection on the range, Wheeler et al²⁴ have shown that a complete immunity did not exist unless the animal had received two inoculations of the virus. Partially immune animals had a much milder form of the disease.

Ecthyma Contagiosum in Man

Ten reports were found in various medical journals in this country concerning human cases of ecthyma contagiosum.^{4,7,8,10,15,16 19,20,21,23} One of the best clinical descriptions of the disease was reported by the Australian authors, Pask et al,¹⁷

who produced the disease experimentally in human volunteers.

Infection usually occurs when a person attempts to medicate or feed an infected lamb. In four to six days following inoculation, the process begins as an erythematous macule. Papules form quickly and these become vesicular or bullous and then pustular in a few days. The pustules rupture and heavy crusts form over the area. Frequently, a typical lesion will resemble a smallpox vaccination with the formation of an umbilicated pustule surrounded by an erythematous halo. Pruritus may be intense in the area of involvement. Regional adenopathy usually occurs but it is generally of a mild nature. Constitutional symptoms are mild to absent unless a secondary bacterial infection occurs. As one would expect, the sites of predilection are the fingers, hands and wrists. If infected material on the fingers is inoculated into the skin of the face and neck, these areas may also become involved. The entire process, if uncomplicated, lasts about three weeks. Healing occurs without scarring.

Virology

The virus of ecthyma contagiosum has been studied by many workers.^{1,4,6,14,22,24} Blakemore et al² reported observing the virus with the electron microscope. Its appearance was not described. The organism can pass through Berkefeld V, Chamberland L₂ Mandler No. 7 filters, and membranes having pore diameters of 600 to 900 millimicrons.^{1,4,5,6,9,14,24} It is resistant to both drying and freezing and may remain viable at room temperature for many months. Wheeler et al²⁴ have shown that tissue and crusts from lesions are usually infectious in dilutions up to 1:50,000. Inoculation of the chorio-allantoic membrane of the chick embryo has failed to produce evidence of the disease.²⁴ Several workers^{13,23,24} have reported unsuccessful attempts to produce lesions on the scarified cornea of a rabbit. Wheeler et al produced a very mild disease with almost inconspicuous lesions in the skin of rabbits.²⁴

Histopathology

Histologic changes occurring as part of the disease have been described by several authors.^{10,17,18} Wheeler and Cawley²⁵ have recently described these changes in great detail.

The pertinent microscopic findings usually con-

sist of ballooning degeneration with intraepidermal vesicle formation, edema of the dermis with dilated blood vessels and lymphatics, a dermal infiltrate of lymphocytes, reticuloendothelial cells and a varying number of polymorphonuclear leukocytes and plasma cells. Increased blood vessel formation is a prominent feature and pseudoe-pitheliomatous hyperplasia may occur.

Ecthyma contagiosum has been classified with the dermatropic viruses, herpes simplex, herpes zoster, vaccina, variola and varicella. There are other findings in the dermis, however, which are associated with chronic granulomas and it is this tendency of the lesion that sets it apart from the usual pock disorders.

Several authors have been unable to demonstrate inclusion bodies in biopsy material from humans or animals.^{10,12,17} Percival has described intracytoplasmic eosinophilic droplets in biopsy material from humans but he failed to designate these as inclusion bodies.¹⁸ Two authors have reported the presence of elementary bodies in cytologic preparations made from the vesicles of human patients.^{2,12}

Treatment

Because the disease is self-limiting and of short duration, no specific therapy is indicated. Care should be directed toward preventing transmission of the infection and preventing secondary bacterial infection. Vaccination of sheep handlers and laboratory workers against the virus may be the most satisfactory way to control the infection.

Case Reports

Case 1.—A thirty-six-year-old farmer was referred to us for diagnosis. About three weeks previously he had assisted a veterinarian inoculate a flock of sheep, in which there had been an outbreak of ecthyma contagiosum. Subsequently, he had treated some of the infected lambs. This consisted of removing crusts from lesions about the nose, lips and gums and applying topical preparations to these areas.

About five days prior to his first examination, he noted the appearance of erythema and swelling at the site of a burn which he had incurred on the left index finger. About twenty-four hours after the onset of redness and swelling, a vesicle had appeared and this had become pustular. Although he opened the pustule, he was unable to express purulent material from the lesion. Examination revealed two circular lesions with sharply demarcated borders on the left index finger. The surfaces were covered by thick crusts. A straw-colored serum could be expressed from the lesions. Epitrochlear and axillary

nodes were present and painful. Constitutional symptoms were absent.

Case 2.—The second patient was a thirty-two-year-old woman. The first patient had given her some orphan lambs immediately preceding the outbreak of ecthyma

His lesions occurred in the sites of small abrasions and developed in the characteristic manner. Epitrochlear adenopathy was minimal. Constitutional symptoms were absent.

Comment

An important aspect of the disease in man is its recognition and differentiation from other diseases. Nomland¹⁶ has aptly called attention to the fact that ecthyma contagiosum does not resemble the usual vesicular eruptions of the hands. In the differential diagnosis, one must include pyogenic bacterial infections, vaccina, pyogenic granuloma, Milker's nodule, tularemia, primary inoculation tuberculosis, anthrax, extragenital chancre, infected verruca vulgaris and sporotrichosis.

Ecthyma contagiosum begins as an inflammatory papule, on which is superimposed a vesicle which may or may not be hemorrhagic. Central umbilication is frequently present, and pustulation occurs following vesicle formation. The primary lesion in a deep impetigo, or bacterial ecthyma, is a pustule which later develops into a crusted pyogenic ulcer. In addition, the two processes differ from each other in distribution, history and duration. Milker's nodules are acquired from cattle and not sheep. The microscopic features of Milker's nodule and ecthyma contagiosum are dissimilar. A history of exposure to infected sheep or laboratory material, plus the clinical appearance of the lesion is usually sufficient for a diagnosis.

Sheep pox and ecthyma contagiosum are not synonyms.^{4,11} Sheep pox is a virus disease, but it is a systemic infection and involvement of the skin is only part of the generalized process.

Summary

1. Three cases of ecthyma contagiosum are reported.
2. Attention is called to the fact that ecthyma contagiosum is more common than is generally recognized.
3. The salient aspects of the disease in sheep and man are reviewed.

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Fig. 1. (above) Case 1. Crusted secondarily infected lesions of seven days' duration.

Fig. 2. (below) Case 3. An early lesion showing sharply demarcated inflammatory papule with central vesiculation.

contagiosum in his flock. As soon as she realized that her sheep had been exposed, she vaccinated them. Although many of her flock developed the disease and required local treatment, it was her observation that the disease had been much milder in her flock.

She developed two erythematous macules which soon became papulovesicular and then pustular on the dorso-lateral aspect of the left index finger. These lesions developed in superficial skin breaks that the patient had incurred while working in her garden. When first seen the lesions were secondarily infected. Lymphadenitis and lymphangitis were present, and she had had fever, malaise and headaches.

Case 3.—The third patient was a fifty-three-year-old engineer and part-time farmer who helped vaccinate and treat a flock of infected sheep. Approximately five days following his initial exposure to the sheep, he developed erythema and swelling on the dorsum of the right middle finger in its distal portion and on the dorsum of the proximal phalanx of the right thumb.

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Indications for the Treatment of Hemorrhoids

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WHEN should hemorrhoids be treated? This question has become a frequent one for a variety of reasons. First, there are an increasing number of people who are in the older age group where hemorrhoids are common. Secondly, we are doing more routine health examinations at the request of the patients themselves or their employers; the primary purpose of these procedures being to exclude cancer or potential cancer. During the rectal portion of the survey, hemorrhoids are often an incidental finding, especially in people over forty. Finally, we have to deal with a large group of patients who consult us because of rectal symptoms. In such cases, the determination of the amount of hemorrhoidal tissue present is dependent upon a thorough rectal examination. If we make an inadequate examination, we may find little evidence of internal hemorrhoids even though they may be large. In such a situation the tendency is to discount the complaint, dismissing the patient without effective treatment. It is not surprising that some of these people turn to irregular practitioners for help.

In order to arrive at a useful set of indications for therapy, it is necessary to consider some of the basic facts involved. Hemorrhoids are masses of varicose veins of the anorectal area. Internal hemorrhoids are varicose veins which originate in the rectum above the anorectal line and are therefore covered with mucous membrane. External hemorrhoids are those that arise distal to that line, and are covered with skin. These veins are distensible and vary greatly in size depending upon the intrarectal pressure. This pressure depends upon the position of the patient and upon whether or not he is bearing down as in the act of defecation. Hemorrhoids are subject to trauma, and are in close proximity to potentially infected structures, the anal glands. In spite of this, we doubt

that hemorrhoids are frequently the focus of any serious infection. We are certain that hemorrhoids are not a precancerous lesion. Since there is no etiologic relationship between hemorrhoids and cancer of the rectum, the mere presence of hemorrhoids is no indication for treatment. All patients who are found to have anatomic evidence of piles, but without symptoms, are advised against any form of therapy.

If a patient without symptoms is told that he has hemorrhoids, it should be made clear to him that cancer will not develop from them. On the other hand, he should understand that if rectal symptoms occur, he must not assume that they are hemorrhoidal in origin. A re-examination is mandatory, because a malignant lesion could develop coincidentally but unrelated to the hemorrhoids.

A significant proportion of patients with large hemorrhoids or with smaller hemorrhoids associated with infection of the perianal tissues, will have annoying complaints. Large hemorrhoids, because of their size, are more liable to trauma and thus more likely to cause symptoms. Hemorrhoids of any size associated with perianal infection cause symptoms because of the inflammatory reaction. These symptoms are rectal bleeding, discomfort often described as a feeling of fullness or lack of complete emptying of the rectum, actual pain, pruritus, protrusion, and soiling. These complaints occur in varying degrees, and it is essential to carefully evaluate their severity.

Complete examination includes the use of instruments which will allow internal visual inspection. Rectal cancer, which in its early stages produces symptoms often attributed to hemorrhoids, must be searched for and eliminated as a possibility. External examination alone will fail to note the presence of internal hemorrhoids, and the all too common practice of simple inspection with the patient bent over, spreading the buttocks, is woefully inadequate. With this kind of examination, patients having annoying symptoms may be

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denied therapy because the examiner sees nothing and concludes that the complaint must be exaggerated. Furthermore, hemorrhoids, unless thrombosed, are not palpable. They must be visualized.

It is not difficult to make an accurate appraisal of the amount of hemorrhoidal tissue present. This is done by examining the patient in the left lateral position with the right thigh flexed. A suitable anoscope, such as the Hirschman anoscope, is inserted, and an adequate light is directed through the scope into the rectum. The patient is asked to bear down during the inspection of each of the three principle hemorrhoidal areas: right anterior, right posterior and left lateral, and again during the removal of the instrument. The scope must be inserted several times in order to visualize the entire circumference of the anal canal. The size of the hemorrhoids becomes evident only when the pressure within the veins is maximal. With the removal of the scope, the hemorrhoids, if very large, will prolapse to the outside. The variation in the size of these veins is similar to that of varicose veins of the leg in different degrees of dependency.

We may conclude then, that the need for treatment depends upon the symptomatology, and upon the size of the hemorrhoids as determined by adequate examination. Asymptomatic hemorrhoids require no treatment. Minimal symptoms indicate either no therapy or palliative treatment, while long standing, annoying complaints usually indicate surgery.

Acute External Thrombotic Hemorrhoid

This common lesion is characterized by the sudden appearance of a painful lump near the anus. It is a bluish, tender mass covered with skin located at the anal opening, and it represents a clot of blood recently formed from the rupture of an external vein. It is not necessarily associated with internal hemorrhoids.

Treatment, for the most part, is indicated to relieve pain. If the patient is seen early, he will complain of pain, and the clot should be removed. This is done as an office procedure. If the patient is seen late when the pain has subsided, and if there is no infection or erosion of the skin, then no treatment is indicated. The clot will absorb. In this latter situation, the discomfort resulting from treatment would be greater than the original complaint.

External Hemorrhoids

We include in this group the common anal skin tags which most often result from healed fissures and resolved external thrombotic hemorrhoids. They are very common in women who have borne children. External hemorrhoids alone and these anal tags seldom cause symptoms. Rarely, when very large, they may become irritated. Occasionally, they cause soiling and efforts to cleanse the parts after defecation may be a factor contributing to pruritus. Conservative measures such as the use of moistened cotton for cleansing will often control such a complaint. If not, simple excision under local anesthesia is indicated.

Internal Hemorrhoids

It is useful to classify symptomatic internal hemorrhoids into three groups.

1. Internal hemorrhoids which do not protrude.
2. Internal hemorrhoids which protrude on defecation but reduce spontaneously.
3. Internal hemorrhoids which protrude on defecation but require replacement.

Internal hemorrhoids which do not protrude.—Patients in this group whose only complaint is rectal bleeding are suitable for injection therapy. This treatment will control bleeding. It is well to emphasize that only internal hemorrhoids should be injected. External piles are never injected with a sclerosing solution because such an extra vascular injection would be extremely painful.

If there is considerable discomfort or actual pain associated with bleeding, it indicates the presence of a complication such as a fissure or infection. If of recent occurrence, relief may be obtained from such palliative measures as hot sitz baths, correction of constipation, and the use of a small oil enema or a bland suppository rectally. If the complaint is of long duration, or if conservative measures fail, then hemorrhoidectomy is indicated.

Internal hemorrhoids which protrude, but which reduce spontaneously.—This is the group most difficult to evaluate. As indicated above, if there are no symptoms, no treatment is necessary. If symptoms are minimal, conservative measures mentioned above may be effective. If complaints are marked, especially when present over a long period of time, hemorrhoidectomy is advised. If surgery is inconvenient, injection therapy may be

tried. However, these patients should be told that relief probably will be temporary and that if symptoms recur, surgery would be the treatment of choice. If the patient is young, the need for surgery is somewhat clearer. In older or poor risk patients, the tendency should be toward conservative treatment. The guiding principle here, as in all elective surgery, should be to weigh the risk, however slight, and the inconvenience of surgery as against the benefit to be expected.

Internal hemorrhoids which protrude and require replacement.—All patients who have hemorrhoids requiring replacement after bowel movements should have a hemorrhoidectomy if their general condition permits. The chances of annoying, even disabling complications such as acute thrombosis developing in this situation are so great that surgery is well advised even in the absence of marked symptoms. We consider the necessity for replacement of hemorrhoids following bowel action a symptom requiring surgical correction.

Strangulated Internal Hemorrhoids

Acute thrombosis of internal and external hemorrhoids associated with prolapse of the anal lining is an emergency. There are two schools of thought concerning the management of this complication. One is conservative treatment of the acute phase followed by hemorrhoidectomy. The other is immediate operation. We prefer the immediate operation because it quickly relieves pain and cures the patient in a much shorter time. The actual surgery is not too difficult. Strangulated internal hemorrhoids following child birth is an exception to this rule. We treat them conservatively with hot compresses.

Hemorrhoids During Pregnancy

Women who have mild to moderate symptoms

only during pregnancy should be treated conservatively. If symptoms are severe, or if they persist between pregnancies, hemorrhoidectomy is indicated. This may be done either between pregnancies or during the first two trimesters. External thrombotic hemorrhoids, if painful, should be relieved by excising the clot as in the nonpregnant patient. Internal hemorrhoids which bleed should be injected. We hesitate to do a hemorrhoidectomy in the immediate post partum period because the surrounding tissues are apt to be extremely edematous and healing may be slow and difficult.

Summary

When to recommend treatment of hemorrhoids is a common problem. It is common because we are dealing with an increasing number of people in the older age group and we are doing more routine health examinations. Contributing to the confusion is the too frequent incomplete examination which fails to note the presence of internal hemorrhoids. Under such circumstances, patients with symptoms may be inadequately treated.

Hemorrhoids, being masses of varicose veins of the rectum, are not precancerous. Their mere presence without symptoms is not an indication for treatment. In other words, the treatment of hemorrhoids is based largely upon symptomatology.

The kind of treatment depends upon the severity of the complaint and upon the amount and type of hemorrhoid present. An internal inspection of the rectum under direct vision is essential to determine the presence of internal hemorrhoids. Furthermore, the patient must bear down in order to fill the hemorrhoidal veins. Minimal symptoms indicate palliative treatment. Long standing, annoying complaints usually indicate hemorrhoidectomy. But before undertaking the treatment of hemorrhoids, one must be sure to exclude cancer of the rectum or colon.

HEART AND CIRCULATORY DISORDERS

Although heart and circulatory disorders cause more deaths than all other diseases combined, great progress has been made against certain forms of heart disease, according to Health Information Foundation. Thanks to new methods of fighting rheumatic fever and rheumatic heart disease, for example, the number of heart disease deaths among children aged one to fourteen has decreased by 95 per cent since 1900.

Heart disease is apparently more prevalent among women than men, Health Information Foundation points out, but it causes 75 per cent more deaths among the men in this country. One possible explanation of the excess male mortality: men are thought to be particularly subject and vulnerable to the strains and pressures of modern life.

The Economic Royalist in Medicine

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ON a cliff towering over the city of Edinburgh, Scotland, is the famous old Edinburgh castle which, for generations long since gone, was a fortification for the Scots during their wars with the English. It was fitting that the courtyard of this castle be chosen as the site of one of the world's most lavish war memorials.

As we entered this building and our eyes accommodated to the dim lighting, a sense of awe overcame us at the grandeur and splendor displayed. The walls are a gleaming marble and are inscribed liberally with gold. There are life-sized statues of soldiers in field battle dress. And there are many crypts off the main room, each for a regimental tribute with the gold inscription on the wall; "To the Glory of God and the Men of the 38th Regiment who gave their Lives for King and Country." And beneath would be a large leather bound parchment book with the names of the fallen heroes of that regiment. The next crypt would proclaim "To the Glory of God and the Men of the 42nd Regiment who gave their lives for King and Country." And so it went until we were just ready to leave and near the exit door I noticed a little brass plate, not more than a foot square, with simple black letters printed on it. It was even placed so that one had to stoop to read it. It said, "To the Glory of God and the Men of the Royal Medical Corps who gave their lives in the service of their fellow men."

It was after we stepped outside, I think, that we began to appreciate how different that last little plaque had been. It was so plain and simple in contrast to the ornateness of the other tributes, as if a nation had purposely felt a quiet, humble gratitude for their medical corps; in fact, had made the distinction quite emphatic. For it had not said, "To the Glory of God and the men who gave their Lives for King and Country," but

rather, "To the doctors who gave their lives in the service of their fellow men."

I have been asked to discuss the economic royalist in medicine. I think I have worried more over the organization of this presentation than any I have ever given. For in reality, we are to discuss some of the basic principles of medical practice in relation to money. It is extremely difficult to keep one's thoughts totally objective on these matters and so easy to dwell on ideals and philosophical points that defy any practical outline for a talk. I shall try my best to keep this from sounding like a sermon; but if you should consider it such, I shall not be too apologetic.

I purposely began with my experience in Edinburgh to point up in an emotional way, the ideal side of a life in medicine lived in the service of your fellow men. I hope that by the end of this discussion I have made this the attractive goal of your professional life that lies just ahead of you. But at the same time, I am not blind to the realities of our modern world and hope to show how these problems must be integrated into the ideal pattern of a doctor's life.

Suppose we get down to the case in point and define the economic royalist. In short, he is the doctor who tries to impress people with the acquisition of too much of the world's costliest goods. He has the biggest house in town, he has the biggest and best automobile, he sports a luxury boat, he dresses in the finest clothes and often overdresses. He will be the first with a color television, he gives lavish parties, his chief topic of conversation will be his investments and his newest gadget that he has bought. Mostly he is talking about money or taxes or what money will buy. He may or may not be a good doctor as far as scientific medicine goes.

What are the effects of this man? The public will not take kindly to this doctor because they instinctively say that because of his appearance of affluence, he charges too much and is making too much money. What about this influence on medicine in general? The public says therefore

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all doctors make too much money. It is surprising how one ostentatious doctor can overshadow the good works of dozens of his more moderate colleagues. That is his danger to medicine in general.

Now let's talk about the individual and not medicine in general. How does a man get this way? Let me suggest that there are two ways. First, we must recognize the personality deficit of a few individuals who must compensate by displaying their worldly goods to prove their success. I noticed an ad for an automobile recently, the first line of which read, "Some men must prove their success, others simply live theirs." This puts the matter quite simply, I think. It would be difficult to analyze the background that created this need in a person, but I suppose any remedy would have to start there. The usual pattern of this man is that he is a merchant. The Bible says, "Where a man's treasure is, there is his heart also." So it goes with this doctor. He is unscrupulous in his charges, he often takes cases beyond his ability, he uses every legal way to make money out of medicine such as unneeded surgery, unnecessary shots once a week, etc. He is known to his colleagues early in the game, but unfortunately, the public is not so discriminating. But the peculiar thing about him is that after he has gained the whole world in material things and lost his professional soul, he suddenly switches and his soul becomes more important for now the ultimate in success is respectability and he will begin in a pitiful way to court the respect of his colleagues. I have seen it happen several times, and I might add that he is seldom successful in this and passes on an unhappy, frustrated and still unsuccessful doctor, *even in his own eyes*.

The second way a doctor gets this way is perhaps the more important to a group of students about to embark on a career, and is more insidious and may happen before he is aware of it. Aristotle said, "In the case of our habits we are only masters of the beginning, their growth by gradual stages being imperceptible like the growth of disease."

Let's take Dr. Doe who is a typical new doctor in our town. He is married like so many of the young ones these days, and has two children. Mamma has seen daddy through some pretty rough years when there was hardly money enough to buy food, let alone any of the luxuries common to the better social class to which their minds and

social background entitle them. For years they have dreamed of the day when things would be different and finally that day seems to have arrived. Mamma wants a really important house right away and daddy thinks she deserves it. She must dress in a way fitting her new station in life and comparable to the other doctor's wives (even though their husbands have been in practice for many years). Of course the doctor should have a new car so that he will look prosperous to his patients and pretty soon mamma has made friends with a few gals who have their own cars and so a second car is added to the family. Incidentally, there must be money to equip a new office which is no small item. Finally, when all this is added up, Dr. Doe is overwhelmed by the shock of financial burdens and he suddenly sees \$50 in Johnny's throat rather than a pair of pretty good tonsils, and Mrs. Jones neurosis turns into a \$5 a week shot. And although he had never done any real surgery, Mr. Black's torn hand could be fixed in the office rather than refer him to a competent surgeon. The habit of the first step is perhaps not easy, because Dr. Doe once thought of medicine as a great calling with pretty fixed habits and ideals, but as Aristotle said, we control only the beginning of our habits, their growth after that is imperceptible. And on just such a weak beginning under stress is born the economic royalist of medicine.

If I could leave you with just one word of advice it would be to plan to start your life in practice on a scale of living commensurate with your early income. Build first a sound layer of good will and service and you will not be troubled with the economic side of medicine nor with your scale of living from then on. If mamma is the helpmate you and she think she is, she will be content to let time take care of material things in its own way and be happy in the sharing of a great service to a community.

I know of no smooth way to make a transition to my next line of thought, so in the parlance of sailboating, "prepare to come about" and we will take a new tack. We will start with a fishing story.

Several years ago a bunch of us went to the Thousand Islands in the St. Lawrence river for some muskie fishing. We got hold of an old Nova Scotia schooner and a ferry boat operator to run it for us. Because there were too many fishermen to permit us all to troll at once, we towed

along a dinghy with an outboard. So when we reached the fishing grounds several miles down river, two fellows we'll call Jim and Joe took off by themselves. Joe had brought his young Labrador retriever on the trip to teach him tricks in the water, so we must add him to the list of occupants of the boat.

It was a very hot, still day in September—but not calm enough for the dog because he promptly became seasick and vomited all over the little boat. The heat of the sun soon made the stench quite potent. The river there is perhaps eleven miles wide and because of distance it was not prudent to return to the mother ship. So they had to endure the odor and keep fishing.

They had made a bet. It was to be one dollar for the first fish and two dollars for the largest fish caught. But fishing was not good that day, and finally after three hours of sun and heat, stench and frustration Joe caught a perch minnow hardly larger than the flat fish lure he was using. As he tossed the illegal fish back he said, "Okay, we'll go in now, pay me three dollars." Thereupon, a heated argument ensued over the technicality of counting an illegal fish at all and the deadline for quitting.

By the time they had returned to the schooner, a fine friendship was fraying at the edges, and Joe was so upset he refused to come aboard the schooner but chose to be towed home in the dinghy with his sick dog for company.

The sequel to this story took place eight years later when Jim and Joe finally went fishing together again. They repeated their bet for one dollar for the first fish and two dollars for the largest. But this time they had learned their lesson, though, and agreed on *all* the rules in advance. It was any fish this time and a time limit of two hours.

I don't have to remind you that disagreement over money can break up friendships. The same thing is true of doctor and patient. It is therefore, very wise to discuss fees in advance, especially for extensive procedures. As our fishermen finally learned, the rules, too, should be talked over in advance.

But doctors as a rule don't do this because there has been preached a doctrine of humanitarianism in medicine in which money is just a nasty word and remuneration an evil thought. But when the patient sees his bill he knows otherwise and classifies his humanitarian a hypocrite.

He preaches "holier than thou" humanity but acts like a businessman.

I think I can explain why most doctors practice this way.

The author of the first treatise on medical ethics in 1860 or thereabouts, plainly stated that "fee for service" was a part of medical practice. He did not ignore the money side of medicine. But by the turn of the century, this country has so many diploma mills in operation that profiteers in medicine were threatening to outnumber the conscientious men who were doing a good job. So about 1912-1914 the AMA wrote a code of ethics deploring the profit motive in medicine and setting forth an ideologic code painting medicine as a completely selfless calling.

In the 1920s the Rockefeller Foundation cleaned house on our medical schools; the diploma mills vanished and the legitimate schools took over. This country slowly but surely became the world leader in medical education. But the doctrine of humanitarianism from this background has persisted until just recently Dr. Elmer Hess, when president of the AMA allowed himself to be quoted in the *Saturday Evening Post* as saying, "We spend too much time talking about what great humanitarians we are. I have made as much as \$100,000 a year in medicine and I am not ashamed of it." This might be classed as a history-making statement because it is such a sharp departure from the usual public relations remarks of the AMA.

I feel it is high time we began talking more about the business side of medicine. I am not ashamed, either, to admit that I make a very good living in the practice of medicine. Why should I be? I think I work hard, charge just an average fee, I have a large investment in myself and in my equipment. On pure business principles I deserve a just return on my investment, as well as my labor. But I do not think nor act like a merchant selling a product. When my customer can't pay, he gets the service anyway. But when he can, I have to be doctor and businessman as well. I have four kids to clothe, feed and educate; I have office help to pay and rent, and finally, my own security to consider when the day comes that I can't keep up the pace anymore.

Now if my remarks have left you wondering about the paradox between my opening theme and my recent remarks, let me try to explain:

Last fall I spent my time in a deer blind reading *Marjorie Morningstar* by Herman Wouk. The central male character is an irresponsible rake of a playwright. Marjorie can't see him as a good financial risk for matrimony so she talks him into the security of an office job and he makes some good money. One day they spend in the Fifth Avenue shops and then are lunching at the Swank Plaza Hotel when he says, "You know, Marjorie, I like having money. Sure it's fun. Of course I like what it will buy. I would like to wear gold cuff links, dine in these fine places and buy you things from the Fifth Avenue Shops. But I could stand it only—and only if both my wife and I agreed that it was nothing but a comic mask to be put on or taken off as we wish. That having money is not the real thing at all." And then he tells her he has found out what the real thing is—"The Hit."

You will remember he is a playwright and he has found out that creating a hit play is the fiber on which his being is suspended. It is not the money he can make from the play, but as he puts it, "the externalizing of one's ego"—being able to create something tangible and external that you can see or sense. This is the real thing in life we seek—and such a hit can nourish the personality for a long period of time.

With the doctor it is the deep satisfaction of knowing he has done a real service. It is not found alone in the glory of spectacular surgery but may be just as real in a tiny office without the glare of spotlights and without any stirring background music.

Let's say for example, that it is late in the afternoon of a busy day in your office. You are rushing, perhaps, because you and your wife have a little anniversary celebration planned for the dinner hour. There is one more patient and if you wish, you can rush her through in a hurry. But your conscientious nature and good habits prevail and you do a real examination, including a pelvic—and there it is—small, but it's there—an early and curable carcinoma of the cervix.

She is the mother of four children who depend on her. She doesn't know anything about medicine and so will never be able to appreciate how

much you have done for her. But you know—you know that her chance for cure rests on your early discovery of her disease. And you know in your own mind that in this simple, routine examination you have created a hit show equal to any spectacular on Broadway and inside you feel good.

For years you see this patient around your town and feel good that you had a big part in her still being there. And the day comes that her son, Johnny, is awarded a scholarship to the university as an outstanding student, and you again feel good living this event with this family for even this day depended upon Johnny having a normal home life and a mother to help.

So you forget the patient dying of stomach cancer and the cardiac invalid you can't do anything about, and you feel good that you are a doctor doing something worthwhile in your community. And certainly you can't remember what you charged this woman nor if she paid her bill. The "Hit" is the real thing.

So now we are ready to put our story together. Medicine is without question a great humanity. It is of necessity also, a business for profit. The big difference in doctors depends entirely upon which he emphasizes. "Where your treasure is, there will your heart be also," the Bible says. It also says that God knows humans have need of food and raiment and material things, but says "Seek ye first the Kingdom of God and all these things shall be added unto you." If we could paraphrase this slightly we would say, "Seek ye first the service of your fellowmen and all these other things shall be added unto you." But the important word is "first." That's what makes the difference.

In conclusion, may I suggest that you ask yourself what you really want out of a life in medicine. Are you the one who wants a life-sized statue set up in a marble palace all resplendent in gold art work? If so, you are to be the economic royalist and merchant of medicine.

Or, are you content with humility in material things? Are you willing, at the end of the road, to settle for a monument of gratitude in the hearts of a community and a little brass plaque not more than a foot square?

Lente Insulin: A Clinical Evaluation

Louis Jaffe, M.D., Robert B. Leach, M.D.,
and Edward S. Salem, M.D.

Detroit, Michigan

IT IS now well over a year since Lente insulin was made generally available in this country. In that time, its value as an insulin of intermediate action has become evident. Because of the resemblance of its effect to that of NPH, globin, and certain protamine zinc mixtures, some observers are of the opinion that this new insulin is not needed at this time. This study was undertaken in order to aid in determining whether, because of its individual characteristics, there is a place for Lente.

A brief review of some of its pertinent chemical facets are of interest. As Hallas-Møller¹ has pointed out, at the pH of blood, zinc and insulin form a relatively insoluble and slowly absorbable compound. Zinc, of course, has been utilized for some years in our familiarly used insulin preparations. However, this slowing effect was not evident as long as phosphate buffers were used. Using an acetate buffer allows the zinc to remain in close contact with the insulin rather than be precipitated out as a zinc phosphate which probably occurs when a phosphate buffer is present. Under the latter circumstance, foreign proteins such as protamine, globin, or histone must be added to create a slowly absorbed product.

The degree of slowness of action of the zinc insulin preparation is dependent primarily on its physical state. Amorphous zinc insulin (semi-Lente) is relatively fast acting, and its duration is slightly longer than regular insulin (eight to twelve hours). The crystalline suspension (ultra-Lente), obtained at a different pH, has an effect not unlike PZI. This difference in action is retained when mixed and varying stable mixtures

can be used. Lente, which is the only mixture available in this country is a 3 to 7 mixture of semi-Lente and ultra-Lente.

Eighteen patients considered well controlled with various other insulins, were given a similar dose of Lente before breakfast. Blood sugars were taken before meals, including 9 o'clock at night and again the following morning at 8 o'clock. In all cases, the diet distribution for each meal, including an evening feeding was 20-30-40-10 per cent. Daily insulin dosage ranged from 28 to 68 units, and in most cases (fourteen) between 32 and 56. These were all hospitalized patients, some with other diseases not considered as affecting the course of the diabetes at the time of the study. Individual graphs are shown (Figs. 1 and 2). Most of the curves with a low point at 4 P.M. are in Figure 1, and those with a low point at 12 noon in Figure 2. The average daily insulin dosage in Figure 1 was 44 units, and in Figure 2, 40 units. The two highest doses in the latter were 52 and 56. Higher dosage, therefore, was not a factor in creating the 12 o'clock drop noted here. Although fasting levels are lower than usually seen, it was not felt that the response pattern would be appreciably altered. The lowest curves in Figures 1 and 2 were associated with mild hypoglycemic symptoms before supper and lunch, respectively, but no extra carbohydrate was added. The individual with the high F B S (240) had been well controlled until the day of the test. However, he was included in our series and exhibited a marked fall to the 4 P.M. level.

As expected, most of the patients (eleven) have a 4 P.M. low point. However, an important percentage (33 per cent) exhibit a 12 o'clock (before lunch) low point indicating greater sensitivity to the semi-Lente component of the mixture. In general, these patients had somewhat higher fasting levels the next morning indicating that in these circumstances a higher percentage of ultra-Lente in the insulin mixture administered would have been desirable. Some of the patients with the lowest 4 P.M. levels were later given a 20-40-30-10

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From the Diabetic Clinic, Detroit Receiving Hospital and the Department of Medicine, Wayne State University College of Medicine, October, 1955.

Lente insulin was supplied by Eli Lilly and Company.

per cent diet distribution of carbohydrate with avoidance of hypoglycemic levels in the late afternoon.

Four patients had a burning sensation at the site

the whole, control was adequate, and it was not thought necessary to add regular insulin to Lente for more rapid effect. When this is done, regular is apparently converted into amorphous zinc in-

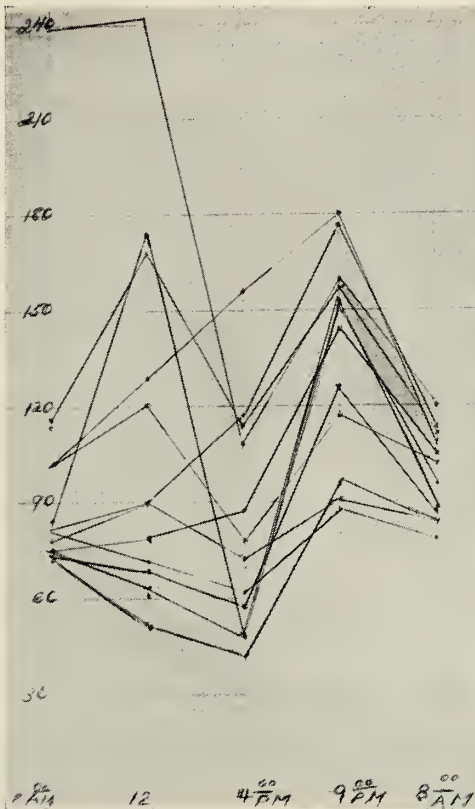


Fig. 1.

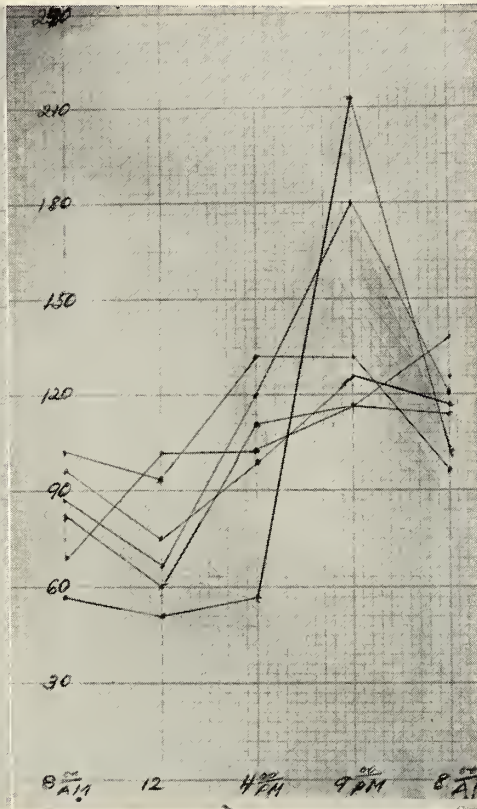


Fig. 2.

of injection, not noted with previous insulins, which were NPH and PZI: regular mixtures. In none of these was it of sufficient intensity to discontinue prolonged use. No allergic reactions were noted.

Five "brittle" diabetic patients, considered uncontrolled by all previous methods, were given equivalent Lente doses and followed for forty-eight hours. Two remained grossly uncontrolled and three exhibited distinct improvement. However, the inherent variability of control in these cases made the duration of study too short to lead to significant conclusions.

Discussion

In our series, Lente fulfills the requirements for classification as an intermediate insulin, with, in most cases, its maximum effect at eight hours, but with a strong immediate effect within four hours in a substantial fraction of our group. On

sulin and, if used immediately, has almost the same effect as if given separately. This is not true if allowed to stand, since it will then become converted into a longer acting insulin and its effects are not accurately calculated.

If semi-Lente and ultra-Lente were readily available, stable individualized mixtures could be formulated for daily use. For example, the 9 P.M. rise in blood sugar, as well as that seen in some cases the following morning at 8 o'clock might well be avoided by an increase in the percentage of ultra-Lente in the mixture. Alteration of the percentage of carbohydrate in the various meals throughout the day, as noted above, would also "flatten" the twenty-four hour curve and tend to prevent hypoglycemic and hyperglycemic levels. Another potential advantage is the absence of the foreign proteins—protamine and globin. This, admittedly, is an empiric advantage, since there is no

(Continued on Page 918)

Editorial

THIRTY-THREE MILLION, FIVE HUNDRED AND SIXTY-NINE THOUSAND

Such is the number of persons in the United States who are eligible for part or full medical (health) care at government expense right now. That is almost one out of every four in our population. The number includes 22,599,000 veterans and, as of January 1, 1957, 5,200,000 military personnel and their families who last year were voted into Medicare, 5,100,000 public assistance rolls, 370,000 Indians and Alaskans, and 300,000 other dependents of U. S. Public Health Service. The United States has assumed responsibility for increasing numbers each year.

The need and urge for benefits and security has always been present when and if government was able and especially willing to "help" in the one service which is so often a calamity to such a large proportion of people—health care. No matter what the income level may be—\$2,500, \$5,000 or \$7,500, or more—much more—the relative purchasing value of the dollar does not increase. Social need for medical care has always been with us and always will be. The stress and strain of the 1930's brought "Compulsory Health Service" to England. Bismarck plus the First World War had brought it to France, Germany—many nations. Only the genius of our home town medical men to diagnose a trend and find an answer prevented America from adopting the "Beveridge Plan"—care from "womb to tomb"—the compulsory prepayment medical service, which engulfed so many other nations.

Individual citizens deserve the best and adequate medical care. What they could not buy individually, our pioneer leaders found could be supplied collectively and at a price they could afford to pay.

New problems, largely economic conditions, actions of pressure groups, demanding of extended services, more security from extra charges, lower purchasing value of our money and the ever-present willingness of government to increase its list of eligible patrons have forced the medical profession especially its Blue Shield to take a new look.

MICHIGAN MEDICAL SERVICE

What is Michigan Medical Service? What is Blue Shield? To the younger medical members of our Michigan State Medical Society who have graduated since the translation of the theory of prepayment into an operative fact and to the older ones who may have forgotten: *Michigan Medical Service* is really the *Michigan State Medical Society*, part and parcel organized to meet a need and do a job which seemed to be impractical to the Medical Society itself. It was organized in Michigan to meet Michigan needs. Because similar organizations grew up independently in different states and at different times is sufficient evidence of the correct basic theory. Michigan Medical Service is actually an arm of the Society. Its Board of Directors is elected by the House of Delegates, who constitute the membership of the corporation. Michigan Medical Service makes reports to The Council and the House of Delegates, the same as other committees. Every member of the Society is just as much involved in the creation, maintenance and government of Michigan Medical Service as in any other activity of the Michigan State Medical Society. He is represented in the governing body by elected delegates.

After the movement became sufficiently extended and accepted by the profession in general, national associations, state, and community groups accepted the term Blue Shield as representing a basic philosophy. Michigan Medical Service is also an outgrowth and extension of a socio-medico-economic trend which has served the profession many times and for many years.

Other Serving Groups

A bit of history which the current legislature could have seriously impaired, is worth recalling. During the late 1920's and the 1930's, the years when medical care for the indigent and the medically indigent was so impractical there were many different plans for partial payment, none in any way satisfactory or suitable. We do not know who was first, but many county medical societies were involved. The Ingham County Medical Society, under a very special committee.

(Turn to Page 886)

Our Number One Problem

It is my personal opinion that the present staggering number of mental patients can be, and must be, reduced. This is the responsibility of the entire medical profession. I am convinced that a large percentage of these cases need never have reached the acute stage if we had recognized their early symptoms of emotional and mental disturbances in our offices. Pressures, both internal and external, usually have become severe before the patient goes to his doctor for help. This patient comes with the fear that the doctor will not understand, that his problems will seem trivial, when in truth they are very real and serious to him. The effect of this fear is an increase in his desire to hide his problem. He withdraws and builds up an unnatural defense. The physician must convince him that he considers the problems as very real and most of all that he is on the patient's side. The art of listening is at its best when we first see such a patient. Listening to what he says and what he does not say can develop an early diagnosis.

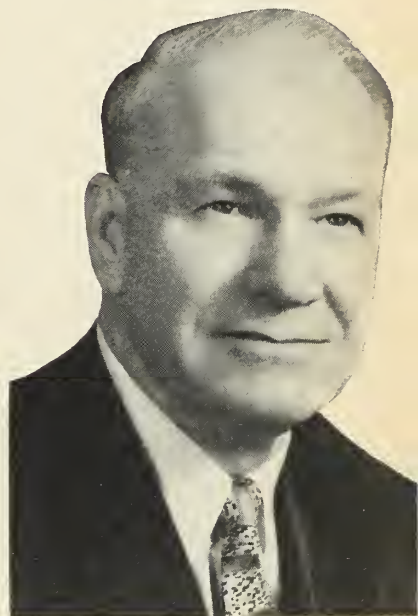
Statistics of the National Committee against Mental Illness should be enough to make us realize we have failed somewhere. An estimated 16,000,000 people in the United States are now suffering from some form and degree of mental illness—that is one in every ten people. More than one out of every two hospital beds in the United States is now occupied by a mental patient. Each year averages another 290,000 new patients in mental hospitals. During the past year, 2½ million people were treated in mental hospitals for some form of mental disorder. Only 2.2 per cent of these were in private hospitals.

Of the hospitalized general medical and surgical cases, 30 per cent were diagnosed as neurotic. Isn't that significant?

The doctor who sees the patient for the first time can give him a great deal of practical and simple psychiatric treatment. The recognition of early problems can be unlimited, and preventative mental hygiene is our duty to our patients. A doctor's office can be the first line of defense against mental illness.

All we need to do is spend more time and dispense far more understanding and kindness. Since our previous methods apparently have proven inadequate, it appears to me it is worth a new try.

President's



Message

Rich Walls M-10

President, Michigan State Medical Society

(Continued from Page 884)

contracted with the City of Lansing and the County of Ingham to care for the medical and surgical needs of the indigent and needy at a stipulated amount which was deposited in a special fund. Their doctors agreed to care for these patients and make no personal charge. This fund is used for certain agreed expenses and benefits to the members of the Ingham County Medical Society. It has accumulated into a fund which has established an outstanding annual clinic and other professional activity. Muskegon County made a similar bargain and has kept the work going, has met the needs of the county, has satisfied their doctors and people, and is justly to be congratulated. Similar programs were adopted in many counties. We believe plans of a somewhat similar nature are in effect in Kent, Genesee and Monroe Counties.

The Calhoun County Medical Society attempted a similar arrangement with the City of Battle Creek but finding difficulties established the Battle Creek Academy of Medicine—later added Dentistry. The Battle Creek Academy bargained with the city and the county to care for the indigent. Soon every item of a medico-economic nature was referred automatically to this bargaining group, which was led by the same men who over the years worked out a plan and were ready to sell prepaid medical care to the citizens in 1935. They were stopped by representation from Lansing and accused of violating insurance laws. The group functioned for many years in medico-economic matters but became inactive during the war. Its affairs were finally settled, and a small treasury amount was put into a needed relief. Jackson County Medical Society met with the Battle Creek group and established the Jackson Academy of Medicine for the same purpose. They appealed to The Council of the Michigan State Medical Society about two years ago for a method of disbanding, as the need had long since passed.

State Department of Social Welfare

Approximately ten years ago the State Department of Social Welfare asked the Michigan State Medical Society to nominate doctors of medicine for an advisory committee to discuss and solve many problems affecting the practice and what to do. Among these problems was the very unsatisfactory method of paying for medical care for certain categories of persons. Doctors were complaining about not being paid, yet the De-

partment was expending what apparently was sufficient money.

A program was evolved, and Calhoun County agreed to be the guinea pigs using the same money, but having Michigan Medical Service administer the distribution. The Society believed it would give the medical care, and make its own payments direct, through Michigan Medical Service and probably save money. When the program was ready for action, the Washington office disapproved. For the past year or more, the Department has adopted a method of operation by which the patient must submit a certificate from the doctor before more money is allowed. It was found there is a saving of nearly 25 per cent.

Organized Sabotage?

The Department of Social Welfare, in order to accept certain additional grants from Washington, and for other reasons, requested some amendments to their control act—House Bill No. 586 of the 69th Legislature. The administrators had consulted with the Medical Advisory Committee and had agreed upon a bill which seemed satisfactory. However, before the bill was introduced, we were informed some Detroit interests insisted on a certain restricting sentence: Section 14B "The State Department shall not contract with any corporation or other private agent for furnishing of any type of medical service to recipients of old age assistance, aid to the blind, aid to the permanently and totally disabled or aid to dependent children on a prepayment or insurance basis."

This would have cancelled the programs just described in Ingham, Muskegon, Kent, Monroe and Flint, also it would have ruled out Blue Cross and Blue Shield. With this step in the door, one can imagine that the same pressure group, or one equally unfriendly, might add a push here and there and ultimately legally terminate the prepayment plans in government programs. Luckily, Michigan State Medical Society was alert, and the legislators granted its request to delete this clause in committee. Was this section deliberately planted?

During the years, Michigan has furnished leadership in many medical problems and has made medical history. We developed many plans to relieve the suffering and stress of our people. We were also the first Medical Service plan to undergo a governmental inquisition from the Governor's Commission. We underwent a year

of vicious publicity, and now we have had an attempt by legislation to stymie our functioning.

More Adequate Care for Needy

For several years, the President in his messages has advocated reinsurance or subsidy to assure more care for persons otherwise uninsurable. He has even advocated modifying the anti-monopoly features to allow prepayment or smaller insurance groups to pool their resources in order to provide prepayment care. The Federal Government has also recognized the prepayment plans of the medical profession through usage over ten years in the Veterans Administration service-connected disabilities program, and has now established the program for dependents of the military-Medicare. This is a direct reversal of their actions a few years ago when we might have started in Michigan in cooperation with the Department of Social Welfare and the Calhoun County Medical Society. Neither does it correspond with an attempt in our 1957 Michigan state legislature to put in a prohibitory clause.

Privately, some of our doctors may class this attempt with other activities which seem too strong and persistent, but do not convince some of our well-disposed doctors who believe the threat of socialized medicine is a bugaboo.

Michigan Medical Service is part of us—it is Michigan State Medical Society. It is ingrained in each of us with our traditional duty to render good medicine to our people.

INVESTIGATIONS AND REPORTS

The request of Michigan Blue Cross Administration for an increase in its rates about a year and a half ago, plus the prompt organized objection from pressure groups including certain labor officials, necessitated a delay in granting and a curtailment of the request. At the suggestion of many, the Governor appointed a Study Commission to investigate Blue Cross, and “incidentally Blue Shield because the two services cannot readily be separated.” Extensive reports and articles began appearing in the *Detroit Free Press* on February 20, 1956 and almost daily until May 22, 1956. In the main, the doctor who cares for the patient received extremely unfriendly blame for every fault and act that could be conjured by ungrateful patients who mainly objected to costs, which incidentally have never increased in the same proportion as general costs of living, or of labor.

The Governor's Commission authorized a complete detailed survey of Blue Cross and Blue Shield and arranged with a certain bureau at the University of Michigan to make the study which was to cost up to \$200,000 and take eighteen to twenty-four months. This survey never started, our profession being accused of blocking it because we asked that the study be done by an impartial group instead of by an oft-quoted prejudiced source.

The House of Delegates at its September 1956 meeting, instructed The Council to conduct a survey to determine what services the public wants and is willing to pay for, and what the profession wants and is willing to provide. The Speaker was directed to appoint a study committee to accomplish the following: “(1) meet with the representatives of Michigan Medical Service to study and develop details and mechanisms, (2) initiate as a joint endeavor and in cooperation with Michigan Medical Service, necessary studies to ascertain what would best serve the public and (3) prepare a complete report for presentation to the House of Delegates at its meeting in 1957 with the proviso that copies of this report shall be sent to each member of the House of Delegates by August 15, 1957.

Separate extended conferences were held by this committee with many and qualified representatives of Michigan Hospital Association, Michigan Medical Service, Industry, Management, Farm Bureau, Labor, and various study groups from the medical profession. The committee devoted one whole day to restudy and in preparation of its report which is at this writing being typed for proofing and final form to be submitted to the House.

Surveys

In conformity with instructions of the House of Delegates (Special Session, April 27, 1957) and just as soon as working details and specifications could be worked out, The Council ordered a survey through the facilities of Michigan State University to determine: (1) what the public wants in the nature of extended or additional medical care, whether they want home and office calls rather than outpatient and office diagnosis, or both, (2) what and how they are willing to pay, if they want full coverage, limited coverage, indemnity type or co-insurance, and (3) what the doctors want from Blue Shield.

This study is in progress and will be completed in time for the House of Delegates in September.

* * *

At the May meetings of the Michigan Blue Cross and Blue Shield Boards authority and funds were provided for a preliminary outline study by the Science Research Group at Ann Arbor, looking to a complete and comprehensive study of administration, plans, programs, history, efficiency, and prospects of both plans. If approved, this will be even more comprehensive than the plan of the Governor's Commission. It will be absolutely unbiased, the four interested groups giving assurance of no interference or hindrance and with complete approval—Michigan State Medical Society, Michigan Medical Service, Michigan Hospital Association, and Michigan Hospital Service. The investigators are to be free to outline their procedure once the fundamental objectives have been agreed upon. If and when ordered, this survey will require at least eight to ten months.

Michigan Medical Service has authorized management to provide a complete surgical service in office, out-patient department, home, wherever necessary, beginning July 1, 1957. This is to be a liberalization, not an extended service; it is to be in the nature of a study and survey to determine certain fundamental costs and usages. This is on a temporary basis, the same as the twenty-one liberalizations now allowed.

To begin at the same time, if it can be arranged, Michigan Medical Service will send to each subscriber whom it has served a return sealed post card reporting payments that have been made for services, and asking the subscriber to fill out and return answers to certain questions, as to satisfaction in the Plan, and/or suggestions and other desires.

Several months ago Michigan Medical Service management completed studies which would offer us extended benefits; office and out-patient surgery; therapeutic and diagnostic radiology and x-ray; consultations; out-patient and office laboratory procedures such as blood tests; electrocardiograms, basal metabolism rate, electroencephalograms, and assistance in certain surgical procedures, amounting to quite complete coverage—this to be sold as a rider or second contract in addition to the basic contract. This service will be made available as soon as the Michigan State Medical Society is ready to accept it and help

administer certain features guaranteeing that contracts will be served as written.

Complete home, office, and hospital care could be made available and sold to groups on demand, thus rectifying one of the criticisms that our plan is not comprehensive. Management has determined the rates that would be needed, and could write such a contract, if need be.

Summary

Just what do the pressure groups or the doctors want? What extra extended service do our subscribers want and are willing to bargain for on a prepayment basis? Who and how many want to discontinue Blue Shield? (There must be some—judging by the arguments). The Federal Government's intense interest in medical problems and its constant willingness to extend medical care is proven by the 82nd Congress which had 250 measures of medical interest introduced. In the 83rd, there were 407 introduced, and in the 84th, there were 571. That shows a trend which should prove to our members who believe the "compulsory health insurance ogre is dead," that it is very much alive.

Voluntary medicine, prepayment insurance (administered by medical men) has made astounding advancement; it must now realign and change some features to correspond with new crises and new needs. Fundamentally, our plan of cohesive and co-operative work by independent advisors without government supervision or any group dictation is right.

Studies are being made to determine the weak spots, the needed splints, the new ideas, and how to apply them as a solid united unit of action. No one can defeat this next step in medical social evolution.

EDITOR'S NOTE: We realize many items have been repeated and emphasized, but the immediate future of medicine's prepayment program is so vital we have published every detail to give more adequate information to our members. We sincerely hope everyone will completely inform himself. He must help make the final decision, the final choice.

WHAT IS A HOSPITAL?

Did you know that except for maternity homes there is no law in the State of Michigan which regulates, defines or accredits hospitals?

There are and have been a number of voluntary nationwide hospital accrediting organizations, such as the College of Surgeons, the American

Hospital Association and the American Medical Association. The latter has been interested in the educational features only. Most of the national organizations concerned with the hospitals have now merged under a single organization known as the Joint Commission on Accreditation.

It seems that the time is ripe for the Michigan State Medical Society and the Michigan Hospital Association jointly to sponsor an official or quasi-official definition of the minimum standards for the organization of a hospital. All of us know that there is a great deal of difference between a converted house with a few beds for relatively minor surgical procedures and a large hospital or hospital center with unlimited facilities of all types. Yet every shade between these two extremes exists in the State of Michigan. To be sure, each and every one is performing a service and has evolved as a response to a need. Nevertheless, doctors, patients, government agencies and insurance organizations, including Blue Cross, have no standard method of evaluation. The public especially lacks discrimination and is frequently interested in almost every other factor about a hospital than its intrinsic medical value.

If action is not taken soon by those people who run and use these workshops of doctors, it would seem that we shall have something thrust upon us from outside sources or something will evolve that we shall neither like nor relish.

CLARENCE I. OWEN, M.D.

JOURNAL COVER STOCK

Have you noticed that the cover of THE JOURNAL is now composed of much heavier stock?

MSMS ANNUAL MEETING

September 25-26-27, 1957

Civic Auditorium, Pantlind Hotel

Grand Rapids

→ Make your hotel reservation now ←

HOUSE BILL 586

(Continued from Page 818)

ability. Each month the Social Welfare Department will receive a statement from the county showing expenditures for hospital care, indicating who received it and how much. From the medical assistance fund, the State will reimburse the county up to 90 per cent of its expenditures. "Up to" means that any collections made by the county toward the costs of hospital care will be applied first.

The 90 per cent reimbursement applies only to expenditures for care in a hospital. If the recipient is in a county medical facility or a private convalescent home, the maximum amount which can be paid for his care is \$90.00 per month.

A section of the bill which would have prohibited the Department from entering into any plan for prepaid medical care for recipients, such as Blue Shield or Blue Cross might provide, was stricken before the bill passed the legislature. Also removed was the provision that would have prohibited the Department from entering into agreements with County Medical Societies for the care of eligible patients.

Since the bill is an extremely complicated one, it is impossible to predict what problems may arise when the law takes effect in July. Because of this, the legislature amended the original bill to provide that the act terminate in December, 1958, for purposes of re-evaluation at that time.

ROLE OF MEDICAL ASSISTANTS

(Continued from Page 842)

3. Organize or assist in organizing refresher courses in medical office administration for the employed medical assistant.
4. Persuade individuals currently employed as medical secretaries to increase their effectiveness on their jobs through additional training in school and/or on the job.
5. Point out to physicians the importance of employing well-qualified medical assistants and remunerating them adequately.

MSMS was one of the original and leading supports of medical assistants organizations which are designed to increase the effectiveness, quality and training of its members. The Michigan State Medical Assistants Society, now nearing the thousand-member mark, is growing with the support and assistance of local county medical societies—the local sponsorship is a part of MSMS "Winning Friends for Medicine" PR Program.

Mickelson will be a featured speaker at the MSMAS annual meeting in Grand Rapids, Tuesday, September 24, 1957. His talk will be on "The Division of Duties in the Doctor's Office."



L. H. BARTHELEMY,
M.D.



O. J. BECKER, M.D.



SAMUEL BELLET, M.D.



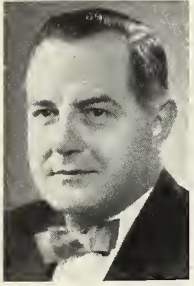
R. J. BING, M.D.



T. I. BOILEAU, M.D.



P. A. BOWERS, M.D.



J. W. BURKS, JR.,
M.D.



O. THERON CLAGGETT
M.D.

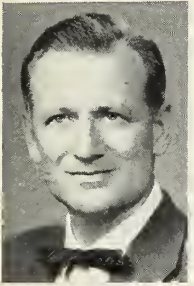
1957
Guest
Speakers



MAX CUTLER, M.D.



D. C. DAHLIN, M.D.



D. T. DAVIDSON, JR.,
M.D.



L. S. FIGIEL, M.D.



S. M. FINCH, M.D.



LEON GOLDMAN, M.D.



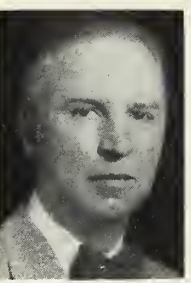
E. KEITH HAMMOND,
M.D.



HANS H. HECHT,
M.D.



R. J. JACKMAN, M.D.



C. T. JAVERT, M.D.



BENJAMIN JEFFRIES,
M.D.



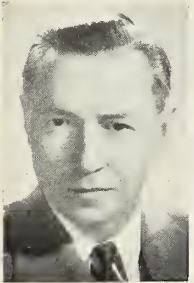
ADELAIDE M. JOHNSON,
M.D.



ORMAND C. JULIAN,
M.D.



P. C. KRONFELD, M.D.



DON W. MCLEAN,
M.D.



R. L. NOVY, M.D.



W. L. PALMER, M.D.



JOHN D. PORTERFIELD,
M.D.



EDWARD PRESS, M.D.



E. L. PRIEN, M.D.

Men With New Messages--For You

The men pictured on these pages have a message of personal value to you—and for your patients.

These experts will converge on Grand Rapids September 25-26-27 to bring to you in three compact days a “refresher course” featuring the latest techniques in medical treatment and surgical procedures as well as the results of day-by-day experiments with the newest drugs and equipment.

They will bring to you at the MSMS Annual Session today's information on today's Medicine for your every-day, clinical use. In the six assemblies, fifteen section meetings and the three discussion conferences *you*, the practicing M.D., will find a rare opportunity to avail yourself of the medical advances of the past 365 days.

All meetings will be held in the Pantlind Hotel and the Civic Auditorium. C. Allen Payne, M.D., of Grand Rapids, is General Chairman of the Committee on Arrangements.

More than a dozen ancillary groups will also meet in Grand Rapids the same week.

The General Practice Section will meet Thursday afternoon at 5:00 o'clock.

The Woman's Auxiliary to the Michigan State Medical Society will convene in its thirty-first annual meeting, and the Michigan State Medical Assistants Society will hold its eighth annual meeting during the same period.

Foremost nonscientific feature during the week-long business and scientific program is the Officer's Night address Wednesday by Michigan Governor G. Mennen Williams. Also included in that

evening's activities in the Pantlind Ball Room is the induction of new MSMS officers, the annual address of 1956-57 MSMS President Arch Walls, M.D., Detroit, and a report of the House of Delegates by Secretary L. Fernald Foster, M.D., Bay City.

This year's Biddle Lecture will be delivered by UAW President Walter P. Reuther on Wednesday afternoon. Mr. Reuther will speak on “The Similar Problems of Labor and Medicine in These Changing Times.”

The two-day House of Delegates session preceding the scientific meetings will hear the results of a state-wide survey, instituted by MSMS to reveal public opinion of present-day medical-surgical prepayment plans and to solicit suggestions for possible changes in MSMS-sponsored Blue Shield.

A bigger and better State Society Night is planned for Thursday. Top flight entertainment has been booked for registrants and their ladies.

One hundred forty-four exhibits set up in the Civic Auditorium will provide you with valuable additional information on the latest scientific and technical advances. All physicians are invited to make full use of this opportunity to talk with people who are interested in you and your practice.

Grand Rapids will see in September the largest MSMS meeting ever. Be safe. Make your reservations now. It's *your* meeting, Doctor. Get the message these experts have for you—and your patients.



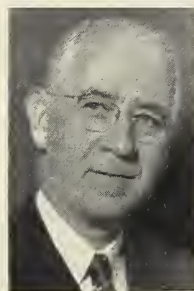
WALTER P. REUTHER



R. J. SCHNECK, M.D.



H. E. SCHMITZ, M.D.



GERALD A. WILSON,
M.D.



T. O. WINSHIP, M.D.

Michigan State Medical Society

Past Presidents, 1866-1955

- 1866—*C. M. Stockwell, Port Huron
 1867—*J. H. Jerome, Saginaw
 1968—*Wm. H. DeCamp, Grand Rapids
 1869—*Richard Inglis, Detroit
 1870—*I. H. Bartholomew, Lansing
 1871—*H. O. Hitchcock, Kalamazoo
 1872—*Alonzo B. Palmer, Ann Arbor
 1873—*E. W. Jenk, Detroit
 1874—*R. C. Kedzie, Lansing
 1875—*Wm. Brodie, Detroit
 1876—*Abram Sager, Ann Arbor
 1877—*Foster Pratt, Kalamazoo
 1878—*Ed. Cox, Battle Creek
 1879—*George K. Johnson, Grand Rapids
 1880—*J. R. Thomas, Bay City
 1881—*J. H. Jerome, Saginaw
 1882—*Geo. W. Topping, DeWitt
 1883—*A. F. Whelan, Hillsdale
 1884—*Donald Maclean, Detroit
 1885—*E. P. Christian, Wyandotte
 1886—*Charles Shepard, Grand Rapids
 1887—*T. A. McGraw, Detroit
 1888—*S. S. French, Battle Creek
 1889—*G. E. Frothingham, Detroit
 1890—*L. W. Bliss, Saginaw
 1891—*George E. Ranney, Lansing
 1892—*Charles J. Lundy, Detroit
 (Died before taking office)
 *Gilbert V. Chamberlain, Flint
 (Acting President)
 1893—*Eugene Boise, Grand Rapids
 1894—*Henry O. Walker, Detroit
 1895—*Victor C. Vaughan, Ann Arbor
 1896—*Hugh McColl, Lapeer
 1897—*Joseph B. Griswold, Grand Rapids
 1898—*Ernest L. Shurly, Detroit
 1899—*A. W. Alvord, Battle Creek
 1900—*P. D. Patterson, Charlotte
 1901—*Leartus Connor, Detroit
 1902—*A. E. Bulson, Jackson
 1903—*Wm. F. Breakey, Ann Arbor
 1904—*B. D. Harison, Sault Ste. Marie
 1905—*David Inglis, Detroit
 1906—*Charles B. Stockwell, Port Huron
 1907—*Hermon Ostrander, Kalamazoo
 1908—*A. F. Lawbaugh, Calumet
 1909—*J. H. Carstens, Detroit
 1910—*C. B. Burr, Flint
 1911—*D. Emmett Welsh, Grand Rapids
 1912—*Wm. H. Sawyer, Hillsdale
 1913—*Guy L. Kiefer, Detroit
 1914—*Reuben Peterson, Ann Arbor
 1915—*A. W. Hornbogen, Marquette
 1916—*Andrew P. Biddle, Detroit
 1917—*Andrew P. Biddle, Detroit
 1918—*Arthur M. Hume, Owosso
 1919—*Charles H. Baker, Bay City
 1920—*Angus McLean, Detroit
 1921—*Wm. J. Kay, Lapeer
 1922—*W. T. Dodge, Big Rapids
 1923—*Guy L. Connor, Detroit
 1924—*C. C. Clancy, Port Huron
 1925—*Cyrenus G. Darling, Ann Arbor
 1926—*J. B. Jackson, Kalamazoo
 1927—*Herbert E. Randall, Flint
 1928—Louis J. Hirschman, Detroit
 1929—*J. D. Brook, Grandville
 1930—*Ray C. Stone, Battle Creek
 1931—*Carl F. Moll, Flint
 1932—J. Milton Robb, Detroit
 1933—*George LeFevre, Muskegon
 1934—*R. R. Smith, Grand Rapids
 1935—Grover C. Penberthy, Detroit
 1936—*Henry E. Perry, Newberry
 1937—Henry Cook, Flint
 1938—*Henry A. Luce, Detroit
 1939—Burton R. Corbus, Grand Rapids
 1940—Paul R. Urmston, Bay City
 1941—Henry R. Carstens, Detroit
 1942—H. H. Cummings, Ann Arbor
 1943—*C. R. Keynort, Grayling
 1944—*A. S. Brunk, Detroit
 1945—*V. M. Moore, Grand Rapids
 (Died before taking office)
 1945—R. S. Morrish, Flint
 1946—Wm. A. Hyland, Grand Rapids
 1947—*P. L. Ledwidge, Detroit
 1948—E. F. Sladek, Traverse City
 1949—Wilfrid Haughey, Battle Creek
 (President-for-a-Day, Sept. 21, 1949)
 1949—*W. E. Barstow, St. Louis
 1950—C. E. Umphrey, Detroit
 1951—Otto O. Beck, Birmingham
 1952—R. L. Novy, Detroit
 (President-for-a-Day, Sept. 22, 1952)
 1952—R. J. Hubbell, Kalamazoo
 1953—L. W. Hull, Detroit
 1954—L. Fernald Foster, Bay City
 (President-for-a-Day, Sept. 28, 1954)
 1954—*R. H. Baker, Pontiac
 1955—W. S. Jones, Menominee

*Deceased.

Michigan State Medical Society

The Ninety-second Annual Session

PANTLIND HOTEL, GRAND RAPIDS
SEPTEMBER 25-26-27, 1957

ANNUAL SESSION INFORMATION

DIRECTORY

Headquarters—Pantlind Hotel and Civic Auditorium, Grand Rapids

Registration—for House of Delegates: Pantlind Hotel. For Scientific Session: Civic Auditorium (see hours below).

House of Delegates—Monday-Tuesday, September 23-24 (Ballroom, Pantlind Hotel).

Exhibits—Wednesday-Thursday-Friday, September 25-26-27, Civic Auditorium.

Press Room—for House of Delegates: Parlor A, Pantlind Hotel; for Scientific Session: Room F, Civic Auditorium.

Woman's Auxiliary Headquarters—Pantlind Hotel, Grand Rapids

Michigan State Medical Assistants Society Headquarters—Manger Rowe Hotel, Grand Rapids.

• **REGISTER**—as soon as you arrive.

Hours:

House of Delegates: Sunday, September 22, Lobby of Pantlind Hotel, 8:00 to 10:00 p.m. and Monday, September 23, 8:30 a.m.

Scientific Session: Tuesday, September 24, 1:00 to 5:15 p.m.; Wednesday, September 25, 7:30 a.m. to 5:15 p.m.; Thursday, September 26, 8:30 a.m. to 5:15 p.m.; Friday, September 27, 8:30 a.m. to 3:30 p.m.

• **NO REGISTRATION FEE FOR MEMBERS OF MSMS AND OTHER STATE MEDICAL ASSOCIATIONS, AMA AND CANADIAN MEDICAL ASSOCIATION.**

Admission will be by badge only to all Scientific Assemblies, Section Meetings, Discussion Conferences and the Exhibition. Please present your MSMS or other State Medical Association, AMA or CMA Membership card to expedite your registration. We wish to save your time.

• **MICHIGAN DOCTORS OF MEDICINE**, in practice but who are not members of MSMS, if listed in the American Medical Directory, may register as guests, upon payment of \$25.00. This amount will be credited to them as dues in the Michigan State Medical Society **FOR THE BALANCE OF 1957** ONLY provided they subsequently are accepted as members by the County Medical Society in whose jurisdiction they practice.

• **DOCTOR**, register Tuesday! Registration of physicians will be held Tuesday afternoon from 1:00 to 5:00 p.m.—as well as on Wednesday-Thursday-Friday, during the 1957 MSMS Annual Session. The Tuesday afternoon registration hours are arranged so that physicians may avoid waiting in line Wednesday morning before the opening Assembly.

We recommend to Grand Rapids physicians—and those who arrive in Grand Rapids on Tuesday—that they register Tuesday, September 24, from 1:00 to 5:00 p.m., Civic Auditorium, Grand Rapids.

C. Allen Payne, M.D., Grand Rapids, General Chairman of Arrangements for the 92nd Annual Session.



• **TELEPHONE SERVICE**—Special lines to handle local and long distance telephone service for registrants at the MSMS meetings are available in the Civic Auditorium just outside the Black and Silver Room: Glendale 1-9213, Glendale 1-9751, Glendale 1-9156. To contact the Exhibit Hall, call: Glendale 1-9145, Glendale 1-9403, Glendale 1-0738. The telephone number at the Pantlind Hotel is Glendale 9-7201.

• **GUEST ESSAYISTS** are very respectfully requested not to change time of their lecture with another speaker without the approval of the Assembly Chairman. This request is made in order to avoid confusion and disappointment on the part of members of the audience.

SECTION MEETINGS

WEDNESDAY, SEPTEMBER 25

5:00 to 6:00 p.m. Occupational Health
Obstetrics-Gynecology
Pediatrics
Radiology
Urology

THURSDAY, SEPTEMBER 26

5:00 to 6:00 p.m. Gastroenterology-Proctology
General Practice
Ophthalmology
Otolaryngology
Public Health and Preventive Medicine
Surgery

FRIDAY, SEPTEMBER 27

5:00 to 6:00 p.m. Anesthesiology
Dermatology and Syphilology
Medicine (starting at 4:00 p.m.)
Nervous and Mental Diseases
Pathology
(starting at 3:00 p.m.)

THREE DISCUSSION CONFERENCES



A. C. FURSTENBERG, M.D.
Ann Arbor
Leader on Wednesday,
September 25, 1957



PERRY C. GITTINS, M.D.
Detroit
Leader on Friday,
September 27, 1957



C. ALLEN PAYNE, M.D.
Grand Rapids
Leader on Thursday,
September 26, 1957

Three quiz periods will be held Wednesday-Thursday-Friday, September 25-26-27, Black and Silver Ballroom, Civic Auditorium, 12:00 noon to 1:00 p.m., with all the guest speakers of the day on the platform.

An opportunity to ask questions concerning the presentations of the guest speakers, or to discuss an interesting case with them, is provided at these Discussion Conferences.

- **CHECK ROOM**—Both in Civic Auditorium and Pantlind Hotel.
- **OFFICERS NIGHT DINNER DANCE**—Wednesday, September 25, 1957, will be a gala occasion for MSMS members and their ladies. Sponsored by MSMS and its Woman's Auxiliary, this dinner dance will begin with cocktails at 7:00 p.m. in the beautiful Continental Room of the Pantlind Hotel. Dinner will follow at 8:00 p.m. in the Ballroom. Dancing during the dinner to a famous name band. The Governor of the State of Michigan, G. Mennen Williams, will address the group at 9:00 p.m.
Arch Walls, M.D., Detroit and Mrs. A. C. Stander of Saginaw are Co-chairmen of this Officers Night gala dinner dance.

NEW INFORMATION IN THE EXHIBIT

Many items of interest or education will be found in the large exhibit of 126 technical and 11 scientific displays. The Exhibit Section at MSMS Annual Sessions is as important and desirable to most doctors of medicine as the scientific papers presented in the Assembly room.

Doctor, stop at every booth—you'll be surprised how much you'll learn! No high-pressure salesman but a courteous well-informed exhibitor will greet you and supply you with some valuable information helpful to your patients.

INFORMATION OF PRACTICAL VALUE IN DAILY PRACTICE will be found at the Michigan State Medical Society Annual Session. All subjects on the MSMS Annual Session Program are applicable to clinical medicine. They stress diagnosis and treatment in everyday practice.

- **POSTGRADUATE CREDITS ARE GIVEN TO EVERY MSMS MEMBER** who attends the Annual Session.
- **TRANSPORTATION**—The C & O Streamliners afford a convenient means of transportation to the MSMS Annual Session in Grand Rapids for hundreds of physicians located in the southeastern and central parts of the State.
- **PARKING**—Metered parking on the streets surrounding the Pantlind Hotel and Civic Auditorium. Outside lots are available as follows:
 1. Rear of Rowe Hotel (two blocks from Pantlind Hotel).
 2. Campau Avenue parking lot (one and one-half blocks from Civic Auditorium).
 3. Opposite Civic Auditorium.
- **CABARET-STYLE DANCE AND FLOOR SHOW**, with the compliments of the Michigan State Medical Society, will be held in the Ballroom of the Pantlind Hotel at 10:30 p.m., Thursday, September 26. All who register, and their ladies, are cordially invited to attend.
- **THE SCIENTIFIC PRESS RELATIONS COMMITTEE** is composed of: P. W. Kniskern, M.D., Grand Rapids, Chairman; H. G. Benjamin, M.D., Grand Rapids; F. C. Brace, M.D., Grand Rapids; G. E. Braunschneider, M.D., Grand Rapids, and A. B. Gwinn, M.D., Hastings.
- **THE HOUSE OF DELEGATES PRESS RELATIONS COMMITTEE** is composed of: K. H. Johnson, M.D., Lansing, Chairman; L. Fernald Foster, M.D., Detroit; J. J. Lightbody, M.D., Detroit; D. W. Thorup, M.D., Benton Harbor; and C. L. Weston, M.D., Owosso.
- **THE MSMS HOUSE OF DELEGATES** convenes Monday, September 23, at 10:00 a.m., Ballroom, Pantlind Hotel; it will hold three meetings on Monday, September 23, at 10:00 a.m., 2:00 p.m. and at 8:00 p.m.; also two meetings on Tuesday, September 24, at 9:30 a.m. and at 8:00 p.m.

MICHIGAN MEDICAL SERVICE
MEMBERS' SCHEDULE

Pantlind Hotel, Grand Rapids
Tuesday, September 24, 1957

Coincident with MSMS Annual Session

1:00 p.m. Luncheon—Continental Room

2:00 p.m. MMS Annual Meeting—Ballroom.

All MSMS Delegates are members of Michigan Medical Service corporation and are expected to attend the MMS Luncheon and Annual Meeting. The MMS Annual Meeting is open to ALL members of the medical profession, who are cordially invited to attend.

• **PAPERS WILL BEGIN AND END ON TIME—**

Believing there is nothing which makes a scientific meeting more attractive than by-the-clock promptness and regularity, all meetings will open exactly on time, all speakers will be required to begin their papers exactly on time and to close exactly on time in accordance with the schedule in the program. All who attend the meeting, therefore, are requested to assist in attaining this end by noting the schedule carefully and being in attendance accordingly. Any member who arrives five minutes late to hear any particular paper will miss exactly five minutes of that paper!

• **THE FIFTH BEAUMONT LECTURE OF THE MICHIGAN STATE MEDICAL SOCIETY** will be presented by Raymond J. Jackman, M.D., Rochester, Minnesota, on Thursday, September 26, 2:00 to 2:30 p.m. Doctor Jackman's subject will be "The Adenoma Carcinoma Sequence in Cancer of the Lower Bowel."

• **THE TECHNICAL AND SCIENTIFIC EXHIBITS** will open daily at 8:45 a.m. and close at 5:15 p.m. Frequent intermissions to view the educational exhibits have been arranged before, during, and after Assemblies.

• **A CONCENTRATED THREE-DAY POSTGRADUATE COURSE—A CAPSULE OF GREAT VALUE TO THE MICHIGAN PRACTITIONERS OF MEDICINE—THE MSMS ANNUAL SESSION OF 1957.**

• **THE HOLDER OF A HOTEL RESERVATION** who fails to show up . . . and fails to cancel his reservation . . . causes gastric hyper-peristalsis, hyper-secretion of the hydrochloric acid, and rubus of the gastric mucosa to the hotel manager.

When convention reservations fill a hotel to the capacity, a room not occupied is a loss in \$\$\$ that cannot be reclaimed.

The MSMS Annual Session always means a capacity house in the headquarters hotel.

Be kind to the hotel manager . . . be good to MSMS . . . be generous to your patients . . . be a friend to yourself—by showing up at the Pantlind Hotel, Grand Rapids for the three days of the MSMS Annual Session, September 25-26-27.

DOCTOR, YOUR PHOTOGRAPH

Joseph Merante, Jr., portrait photographer of New York—the official photographer for the Michigan State Medical Society—will be in attendance at the Michigan State Medical Society Annual Session at the Pantlind Hotel, Grand Rapids, the week of September 23. Mr. Merante, of 475 Fifth Ave., New York 17, will be available for service to MSMS members and their guests on the Mezzanine of the Pantlind Hotel between the hours of 9:00 a.m. and 4:30 p.m.

The Michigan State Medical Society's desire is to have a photograph in its files of everyone of its members. Mr. Merante will help achieve this ambition of your State Society, with your kind cooperation. It will take but one minute of your time in Grand Rapids.

ADVANCE REGISTRATION OF DELEGATES

Sunday, September 22, 1957

8:00 to 10:00 p.m.

Lobby of Pantlind Hotel

HOTEL RESERVATIONS MICHIGAN STATE MEDICAL SOCIETY

92nd Annual Session

Grand Rapids, September 25-26-27, 1957

The reservation blank below is for your convenience in making your hotel reservations in Grand Rapids. Please send your application to the Committee on Hotels for MSMS Convention, Pantlind Hotel, Grand Rapids, Michigan. Mailing your application now will be of material assistance in securing hotel accommodations.

As very few singles are available, registrants are requested to co-operate with the Committee on Hotels by sharing a room with another registrant, when convenient.

Committee on Hotels,
Michigan State Medical Society
c/o Pantlind Hotel
Grand Rapids, Michigan

Please make hotel reservation(s) as indicated below:

_____ Single Room(s) _____ persons

_____ Double Room(s) for _____ persons

_____ Twin-Bedded Room(s) for _____ persons

Arriving September _____ hour _____ A.M. _____ P.M.

Leaving _____ hour _____ A.M. _____ P.M.

Hotel of First Choice: _____

Second Choice: _____

Names and addresses of all applicants including persons making reservation:

Name	Address	City	State
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

Date _____ Signature _____

Address _____ City _____

Michigan State Medical Society

The Ninety-second Annual Session

PANTLIND HOTEL-CIVIC AUDITORIUM,
GRAND RAPIDS

SEPTEMBER 25-26-27, 1957

Program of Assemblies and Sections

WEDNESDAY MORNING

September 25, 1957

First Assembly

Black and Silver Ballroom, Civic Auditorium

Chairman: J. H. BEATON, M.D., Grand Rapids
Secretary: C. E. BOOHER, M.D., Grand Rapids

A.M.
9:00

"MANAGEMENT OF HABITUAL ABORTION"

CARL T. JAVERT, M.D., New York, New York

Professor of Obstetrics and Gynecology, College of Physicians and Surgeons, Columbia, University; Director, Obstetrics and Gynecology, Woman's Hospital, Division of St. Luke's; and Attending Obstetrician and Gynecologist, New York Hospital

A systematic program of preconceptional, prenatal care including psychosomatic therapy has been found to be effective in the prevention of habitual abortion. The preventive program resulted in the delivery of viable offspring in 80 per cent of the habitual abortion patients. They had previously aborted 92 per cent of their pregnancies. While this approach has not been used in a large obstetrical population, it can be expected to reduce the presently accepted abortion rate of 10 per cent to a lower figure, since a study of 2,000 abortion specimens indicated that one in five was salvageable at the time of the abortion. It was conjectured that measures begun early enough should salvage some of the remaining 80 per cent that were dead at the time of the abortion. Any programs devoted to an improvement in fetal salvage should consider reducing fetal wastage resulting from spontaneous abortion.

9:30 "DIAGNOSIS OF PRECLINICAL CANCER OF THE CERVIX"

HERBERT E. SCHMITZ, M.D., Chicago, Illinois

Professor and Chairman, Department Obstetrics and Gynecology, Stritch School of Medicine of Loyola University; Director, Mercy Hospital Institute of Radiation Therapy

The successful outcome of the treatment of cervix carcinoma is directly proportional to the clinical stage of the disease at the time therapy is instituted. It follows, therefore, that the greatest single contribution to be made in reducing the death rate of this disease is early diagnosis. Since the diagnosis of cervix cancer is made by the microscope, two main procedures are available to the clinician to screen properly his female patients, namely, cervical biopsy and vaginal cytology. These two diagnostic aids complement each other and may be considered technical adjuncts. Each has its place of greater value and when employed to best advantage will disclose many cases which would otherwise be missed in the early stages.

The obtaining of specimens, either by biopsy or smear, while remaining the simplest of procedures, nevertheless, requires certain diligence to avoid false negative reports. It is important, for example, that material be obtained for smear from both the vault and cervical canal by abrasive swabbing and the slide fixed immediately. Biopsies should consist of generous fragments and in addition to the obvious site of pathology should include specimens

from adjacent areas as well, the so-called four quadrant biopsy. The use of electrocoagulation or actual cautery to secure tissue specimens may so distort the histological pictures as to make the interpretation impossible. While the acquisition of material initiates the diagnostic investigation, the interpretation can be a matter of contention. In some instances this is of grave prognostic importance and a number of opinions should be sought. Take, for example, the problem posed by the report of carcinoma-in-situ. Here is a lesion which, by definition, is confined to the epithelium and should lend itself to complete eradication. However, several questions immediately arise. Is this actually carcinoma or is it basal cell hyperactivity? If it is carcinoma, is it certain that the biopsy does not merely represent a superficial fragment of a lesion which is actually malignant? Are there other areas which might show the disease in a more advanced stage? Are the changes seen in the glandular lumina truly neoplastic or are they merely epidermoidization? Similar problems arise when biopsies are taken during pregnancy and the varied cellular responses incident to the influence of gestation are interpreted as neoplastic. Reversion of these cellular aberrations to normal after delivery has occurred often enough to cast considerable doubt on any diagnosis of malignancy during pregnancy. This is not to imply that such occurrences are so rare they may be dismissed as too improbable, but it does serve to warn the clinician that every effort must be made to establish the diagnosis with certainty before treatment is undertaken.

It should be remembered that any technical procedure is subject to a certain degree of error and a report of nonmalignant condition in a case which does not show clinical improvement under treatment may be misleading. Follow-up examinations by smears may reveal persistent abnormal cells despite negative biopsies and thus demonstrate the need for repeat or more thorough tissue investigation. Conization of the endocervix with the cold knife may be the ultimate outcome when indicated by clinical symptoms or persistent abnormal cytology.

10:00 INTERMISSION TO VIEW EXHIBITS

11:00 "ACCIDENTAL POISONING IN CHILDHOOD"

EDWARD PRESS, M.D., New York, New York

Field Director, American Public Health Association; Chairman, American Academy of Pediatrics Sub-Committee on Poisoning; Member, American Medical Association Committee on Toxicology

A discussion of the major points in the treatment and prevention of poisoning in children and a summary of the extent and type of Poison Control Centers in the United States, including a brief résumé of the sample operation of a typical Poison Control Center.

11:30 "RECENT ADVANCES IN TREATMENT OF URINARY STONE"

EDWIN L. PRIEN, M.D., Brookline, Massachusetts

Assistant Clinical Professor of Urology, Boston University School of Medicine; Urologist, Newton Wellesley Hospital, Newton; Visiting Urologist, St. Elizabeth's Hospital; Senior Consultant in Urology, West Roxbury Veterans Administration Hospital.

Urolithiasis is a recurrent disease in many people. We do not know the cause of the great majority of urinary calculi. Certain predisposing factors in stone formation are recognized but cannot be considered causal because stone may occur without them or be absent when they are present. Despite this, it is believed that it may still be possible to prevent recurrence of stone.

Surgical treatment alone will not suffice. Medical regimens to prevent recurrence have been unsuccessful

because they were often inadequate, they were too stringent to insure prolonged cooperation of the patient, or were often casually applied without a proper knowledge of (or interest in) the stone and the environment in which it grew. Accurate analysis of all parts of a calculus is important because it provides information on factors of causation and on regimens of value in preventing recurrence.

Except in the occasional heavy milk drinker who may make calcium stone, there is little in dietary therapy to prevent stone recurrence. A liberal fluid intake is indicated in all. For cystine and uric acid stone only alkalization of the urine is of major value. Measures to prevent calcium stone (accounting for 90 per cent of all cases in North America) include—eradication of urea-splitting urinary infection, mobilization of recumbent patients to prevent bone demineralization with its attendant hypercalcinuria, surgical ablation of hyperparathyroidism, diversion of calcium from the urine by administration of sodium phytate, diversion of phosphate from the urine by administration of aluminum gels, acidification of the urine to increase the solubility of calcium salts and salicylate therapy to chelate calcium to render it unavailable for stone formation.

2:00 END OF FIRST ASSEMBLY

WEDNESDAY NOON

September 25, 1957

12:00 noon to 1:00 p.m.

Discussion Conference

Black and Silver Ballroom, Civic Auditorium

Leader: A. C. FURSTENBERG, M.D., Ann Arbor

Participants: THORNTON I. BOILEAU, M.D., Detroit, Michigan; PAUL A. BOWERS, M.D., Philadelphia, Pennsylvania; MAX CUTLER, M.D., Beverly Hills, California; DOUGLAS T. DAVIDSON, Jr., M.D., Philadelphia, Pennsylvania; STUART M. FINCH, M.D., Ann Arbor, Michigan; CARL T. JAVERT, M.D., New York, New York; EDWARD PRESS, M.D., New York; EDWIN L. PRIEN, M.D., Brookline, Massachusetts; MR. WALTER P. REUTHER, Detroit, Michigan; HERBERT E. SCHMITZ, M.D., Chicago, Illinois.

HOTEL RESERVATIONS

for the

91st ANNUAL SESSION

MSMS

should be made

NOW

WEDNESDAY AFTERNOON

September 25, 1957

Second Assembly

Black and Silver Ballroom, Civic Auditorium

Chairman: F. C. BRACE, M.D., Grand Rapids

Secretary: A. M. HILL, M.D., Grand Rapids

P.M.

2:00

"PRACTICAL THERAPY OF CONVULSIVE DISORDERS"

DOUGLAS T. DAVIDSON, JR., M.D., Philadelphia, Pennsylvania

Associate in Neurology, University of Pennsylvania; Assistant Neurologist, Children's Hospital of Philadelphia

This presentation deals with therapy for all symptoms arising from abnormal and excessive electrical discharges of the brain's nerve cells. These symptoms, both convulsive and non-convulsive, reflect a wide variety of intracranial and systemic disorders. As a general principle, correction of the cause or causes for seizures is considered before purely symptomatic suppression of the attacks themselves. Sodium Phenobarbital, for example, is equally effective in controlling "febrile convulsions," associated with purulent meningitis and the garden variety of "febrile convulsion." A convulsive tendency secondary to a brain tumor also responds to the dose of Dilantin appropriate for post-traumatic seizures. Chronicity of recurrence rather than cause or clinical symptomatology seems the more valid distinction among "epileptic" convulsions and others at the present state of our knowledge. The clinical seizure pattern of chronic attacks as well as the age of onset greatly influences prognosis and choice of treatment. The significance of heredity, of social-emotional adjustment, the value of various diagnostic procedures, including electroencephalography, the role of surgical treatment, and the characteristics of the most efficient anti-epileptic drugs will be discussed. An optimistic outlook for most cases seems justified in view of the effectiveness of modern therapy and the improvement in community attitudes toward the patient handicapped by recurrent seizures.

2:30 "MEDICINE AND LABOR IN THESE CHANGING TIMES"

MR. WALTER P. REUTHER, Detroit, Michigan

President, United Automobile Workers of America; Vice President, AFL-CIO; President, Industrial Union Department, AFL-CIO; President, Community Health Association of Detroit

3:00 INTERMISSION TO VIEW EXHIBITS

4:00 "PHYSIOLOGICAL OBSTETRICS"

PAUL A. BOWERS, M.D., Philadelphia, Pennsylvania

Assistant Professor of Obstetrics and Gynecology, Jefferson Medical College

4:30 "CANCER OF THE BREAST"

MAX CUTLER, M.D., Beverly Hills, California

Surgical Staffs, Cedars of Lebanon and St. John's Hospitals, Los Angeles; formerly Director of the Chicago Tumor Institute

Cancer of the breast is not only the most important of the major forms of cancer, it is also one of the most treacherous. Fortunately, however, the disease lends itself to a reasonable degree of prevention and early diagnosis. Although radical mastectomy with or without postoperative radiation is the accepted method of treatment for presumably operable mammary cancer, this view has been challenged in recent years. It has been suggested that simple mastectomy followed by a special type of radiotherapy has certain advantages. This subject is in a state of controversy.

Another development in recent years has been the extension of the surgical procedure to include removal of mediastinal lymph nodes. This development also is at present in a controversial state. There is an increasing tendency to avoid the use of prophylactic postoperative radiation as a routine procedure. Efforts to control advanced and metastatic carcinoma of the breast with steroid hormones have been partially successful and form a subject of active research.

The most interesting and perhaps the most important phase of the problem of mammary cancer is related to the so-called precancerous lesions. Cystic disease of the breast, papillomata and so-called Schimmelbusch's disease—commonly regarded as precancerous lesions—require clarification. An effort is made in this presentation to interpret the significance of these lesions and to indicate the proper course of treatment.

5:00 END OF SECOND ASSEMBLY

OFFICERS NIGHT DINNER DANCE

Wednesday, September 25

Sponsored by the
Michigan State Medical Society
and the
Woman's Auxiliary

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Grand Ballroom, Pantlind Hotel

Grand Rapids

— Limit of 125 couples —

— Program of Sections —

WEDNESDAY AFTERNOON

September 25, 1957

SECTION ON OBSTETRICS AND GYNECOLOGY

Meeting—5:00 to 6:00 p.m.—Black and Silver Ballroom
Civic Auditorium

Chairman: J. H. BEATON, M.D., Grand Rapids

Secretary: R. W. McCURE, M.D., Detroit

"TREATMENT OF RADIO-RESISTANT
CERVIX CANCER"

HERBERT E. SCHMITZ, M.D., Chicago, Illinois

Modern radiotherapy is producing good end results in approximately half of the patients treated. The failure of the treatment is caused by a variety of factors, one of the most important of which is the intrinsic radio resistant character of an individual lesion. When the feature of a given case has been demonstrated by clinical observation, cytological smear or tissue biopsy, a more radical approach to tumor control may be indicated. Since many of these cases have extension of considerable magnitude, the technical difficulties in management are heavily exaggerated. The patient's condition is likewise compromised by damage to the upper urinary tract and poor liver physiology secondary to her protracted illness. One hundred twenty cases from the material seen in the Mercy Hospital Institute of Radiation Therapy were subjected to extensive surgery for recurrent or resistant disease. Slightly more than half had radical hysterectomy and lymphadenectomies performed. The remaining case had complete or partial pelvic exenterations. The complications, morbidities and mortality were evaluated to determine whether radical surgery had any additional benefit to offer in the treatment of radio-resistant lesions.

Evidence is presented to show what factors have the greatest influence on the successful outcome of these procedures. The marked contrast in salvage rates between radical hysterectomy and pelvic exenteration serves to emphasize the seriousness of a decision to employ ultra radical methods.

SECTION ON OCCUPATIONAL HEALTH

Meeting—5:00 to 6:00 p.m.—Sadler Lounge, Pantlind Hotel

Chairman: O. J. JOHNSON, M.D., Bay City

Secretary: P. B. RASTELLO, M.D., Warren

"SMALL PLANT PROGRAMS"

THORNTON I. BOILEAU, M.D., Detroit, Michigan

SECTION ON PEDIATRICS

Meeting—5:00 to 6:00 p.m.; Reception—6:00 to 6:30 p.m.
Schubert Room, Pantlind Hotel

Chairman: C. E. BOOHER, M.D., Grand Rapids

Secretary: A. M. HILL, M.D., Grand Rapids

"PRACTICAL MANAGEMENT OF BEHAVIOR PROBLEMS IN CHILDREN"

STUART M. FINCH, M.D., Ann Arbor, Michigan

Director, Children's Psychiatric Hospital; Associate Professor of Psychiatry, University of Michigan Medical School

Essential to the practical management of any syndrome in medicine is the proper understanding of the etiology. The physician seeing a child with a pain in his abdomen

WEDNESDAY EVENING

September 25, 1957

Officers Night

- P.M.
- 6:30 Reception—Continental Room, Pantlind Hotel
- 7:15 Officers Night Dinner Dance—Ballroom, Pantlind Hotel
- 8:30 1. Announcements and brief report of House of Delegates actions by L. Fernald Foster, M. D., Secretary.
2. Induction of New Officers.
3. President's Annual Address by Arch Walls, M.D.

must discover the cause before he can proceed with intelligent management. If the child has appendicitis, one course of action is suggested. If the child has a mild general gastroenteritis, another course is advisable. It is equally important that the child with a behavior problem be really understood before any therapeutic program is planned and initiated.

The adequate evaluation of a child's misbehavior requires a certain knowledge of his development and of his family situation. Most children suffer behavior problems because of various environmental difficulties to which they have been exposed. Prominent on the list of environmental influences is parental psychopathology. Parents usually try to do the best they can but are often handicapped by problems within themselves of which they are at best only dimly aware. The child reacts to unconscious problems in his parents and they in turn counteract to the behavior problem he develops. There ensues a vicious cycle in which parent and child contribute to further problems.

Each child, if normally endowed, goes through a series of emotional phases in his development. During each stage he has certain emotional characteristics. If the parents are mature and if they understand the child, they will meet his needs and he will continue to grow emotionally. If the parents, by virtue of their own inner problems, do not understand or cannot meet the child's needs, the youngster may develop a behavior problem. It is important for the physician to know where and how such needs have not been met and thus how the behavior problem developed. If he has this basic knowledge he can then better outline an effective therapeutic regime.

This presentation will attempt to outline and discuss some of the salient features of emotional development and parental roles. Special attention will be given to the management of various common behavior difficulties with particular reference to the handling of parents.

SECTION ON RADIOLOGY

Meeting—5:00 to 6:00 p.m.—Room G, Civic Auditorium

Chairman: E. O. PEARSON, M.D., Kalamazoo

"INDICATIONS AND LIMITATIONS OF RADIOTHERAPY IN CANCER"

MAX CUTLER, M.D., Beverly Hills, California

Certain forms of cancer by virtue of site, extent, gross and microscopic features and unknown biological factors are amenable to radiotherapy whereas other forms are not suitable to this method of treatment.

Although some progress has been made with increase in x-ray voltage and the use of large quantities of radium and radioactive cobalt, the over-all results have not been greatly improved by the introduction of these new techniques. One reason for this is that most cancers treated by radiotherapy are advanced and inoperable. It is obvious that the results to be expected in these categories are at best limited.

A discussion of the progress that has been made with supervoltage x-rays, telecurietherapy and cobalt therapy is presented. Special indications for interstitial radiation in the form of removable platinum radium needles are discussed and some late results presented.



HON. G. MENNEN WILLIAMS

4. Address by Honorable G. Mennen Williams, Governor of the State of Michigan.

9:45 Adjournment.

SECTION ON UROLOGY

Meeting—5:00 to 6:00 p.m.—Room 222 Pantlind Hotel

Chairman: R. P. LYTLE, M.D., Detroit
Secretary: J. F. HARROLD, M.D., Lansing

"MECHANISMS OF STONE FORMATION AND PREVENTION"

EDWIN L. PRIEN, M.D., Brookline, Massachusetts

The urinary stone is a product of its environment. Predisposing factors in this environment are known; causes still elude us. Therapeutic alterations in the environment may prevent stone growth. A simple straightforward exposition of the mechanisms which may promote or inhibit calculus formation, discussed from both the laboratory and clinical standpoints with the aid of lantern slides.

Speakers like to hear from their audiences. If you especially enjoy certain presentations, write the lecturers and tell them. Obtain addresses from the MSMS Press Room.

THURSDAY MORNING

September 26, 1957

Third Assembly

Black and Silver Ballroom, Civic Auditorium

Chairman: O. J. JOHNSON, M.D., Bay City
Secretary: R. P. LYTLE, M.D., Detroit

A.M.

9:00

"THE DIAGNOSIS AND TREATMENT OF THE LESS OBVIOUS CARCINOMA OF THE THYROID"

THEODORE O. WINSHIP, M.D., Washington, D. C.

Pathologist, Garfield Memorial Hospital, Children's Hospital, Episcopal Eye, Ear, Nose and Throat Hospital

The term "less obvious carcinoma" restricts this discussion to the consideration of the malignant tumors measuring less than 2 cm. in diameter. Approximately 18 per cent of thyroid cancers fall into this category. Because of the small size of the primary tumor, carcinoma is frequently unsuspected until cervical lymph nodes become enlarged by metastatic carcinoma.

During the past decade the incidence of thyroid carcinoma has shown a marked increase. The increase is mainly in the type of carcinoma which is "less obvious." This reflects a growing tendency to investigate solitary thyroid nodules and to excise for diagnosis persistent painless cervical lymph nodes. Most of the "less obvious carcinomas" are papillary in type and are known to be the least aggressive of all thyroid cancers with the first metastases often appearing in the cervical nodes.

The treatment of patients must be individualized; however, a safe general rule is to recommend the removal of all single nodules in women, and all nodules in men and children. The removal of a nodule infers lobectomy. When cervical nodes are present without a palpable nodule in the thyroid gland a lymph node should be removed for frozen section. If this is found to contain thyroid tissue, a total thyroidectomy and neck dissection should be performed immediately. When a nodule in the thyroid gland is suspected of being malignant, in the absence of cervical nodes, a lobectomy should be performed and the specimen submitted for frozen section. If this proves to contain a carcinoma, a total thyroidectomy should be performed. In this situation a neck dissection should await histologically proved cervical node metastases.

9:30

"PRESENT-DAY TREATMENT OF CARCINOMA OF THE BREAST"

O. THERON CLAGGETT, M.D., Rochester, Minnesota

Head of Section, Division of Surgery, Mayo Clinic, Professor of Surgery, Mayo Foundation, Graduate School, University of Minnesota

For approximately sixty years radical mastectomy has been accepted by most surgeons as the best treatment available for carcinoma of the breast. In recent years some doubts have arisen regarding this procedure. It has been suggested by some statisticians that any treatment of breast carcinoma is futile. Some surgeons have suggested more extensive surgical procedures than the classic radical mastectomy, while simple mastectomy with intensive irradiation therapy has been advocated by others as the preferable treatment for carcinoma of the breast. The problem of what constitutes the best possible treatment of carcinoma of the breast at the present time has been complicated further by increasing evidence of the influence of changes in hormonal environment on carcinoma of the breast and by the development of a variety of means of altering hormonal balance.

It is very appropriate that the treatment of carcinoma of the breast should be subjected to a critical reappraisal. Carcinoma of the breast is a common disease and its proper treatment is a matter of great importance. The rationale of the various methods of treating carcinoma of the breast will be discussed and the results of each compared.

10:00 INTERMISSION TO VIEW EXHIBITS

900

11:00 "THE EARLY AND LATE TREATMENT OF NASAL FRACTURES"

OSCAR J. BECKER, M.D., Chicago, Illinois

Assistant Professor of Otolaryngology, University of Illinois; Director of Plastic Surgery Clinic, University of Illinois Eye and Ear Infirmary; Attending Surgeon at University of Illinois Research and Educational Hospital.

The etiology, pathology, mechanics, and management of recent and late fractures will be discussed in detail and complications and their treatment will be included.

11:30 "OUTPOSTS OF MEDICAL RESEARCH"

JOHN D. PORTERFIELD, M.D., Washington, D. C.

Assistant Surgeon General, Public Health Service, Department of Health, Education, and Welfare

12:00 END OF THIRD ASSEMBLY

THURSDAY NOON

September 26, 1957

12:00 noon to 1:00 p.m.

Discussion Conference

Black and Silver Ballroom, Civic Auditorium

Leader: C. ALLEN PAYNE, M.D., Grand Rapids

Participants: OSCAR J. BECKER, M.D., Chicago, Illinois; O. THERON CLAGGETT, M.D., Rochester, Minnesota; KIEFFER D. DAVIS, M.D., Bartlesville, Oklahoma; LEO S. FIGIEL, M.D., Detroit, Michigan; RAYMOND J. JACKMAN, M.D., Rochester, Minnesota; BENJAMIN JEFFRIES, M.D., Detroit, Michigan; ORMAND C. JULIAN, M.D., Chicago, Illinois; PETER C. KRONFELD, M.D., Chicago, Illinois; DON W. McLEAN, M.D., Detroit, Michigan; C. ALLEN PAYNE, M.D., Grand Rapids, Michigan; JOHN D. PORTERFIELD, M.D., Washington, D. C.; GERALD A. WILSON, M.D., Detroit, Michigan; THEODORE O. WINSHIP, M.D., Washington, D. C.

MUCH THAT IS NEW—AND
USABLE—WILL BE FOUND
IN THE MSMS EXHIBIT!

THURSDAY AFTERNOON

September 26, 1957

Fourth Assembly

Black and Silver Ballroom, Civic Auditorium

Chairman: J. M. KAUFMAN, M.D., Detroit

Secretary: B. C. WILDGEN, M.D., Muskegon

2:00

WILLIAM BEAUMONT, M.D., LECTURE

(Sponsored by the Michigan Foundation for Medical and Health Education, Inc.)

"CANCER OF THE LOWER BOWEL: THE ADENOMA CARCINOMA SEQUENCE"

RAYMOND J. JACKMAN, M.D., Rochester, Minnesota

Head of the Section of Proctology, Mayo Clinic, and Associate Professor of Proctology, Mayo Foundation, Graduate School, University of Minnesota

Considerable convincing evidence has accumulated that most, if not all, adenocarcinomas of the large intestine originate as polyps (adenoma). The factors which support this assumption will be presented, in company with a discussion of those measures which must be taken to prevent the final evolution of polyp-to-cancer.

2:30

"GLAUCOMA"

PETER C. KRONFELD, M.D., Chicago, Illinois

Professor of Ophthalmology, University of Illinois School of Medicine

Despite all recent progress in general medicine and ophthalmology it still happens that chronic simple glaucoma is not recognized until it has reached too advanced a stage to be treated effectively. The principal reason for the late detection of the disease is the insidiousness of its onset and the inconspicuousness of its early, subjective as well as objective, symptoms. These features plus the relative refractoriness to treatment of the late stages account for the fact that chronic simple glaucoma is still a major cause of blindness in the USA. Redemptive features of the disease are its responsiveness to pressure-lowering treatment if instituted early and the slow rate of progression. The permanent visual damage that occurs during the first two years of the unrecognized and therefore untreated disease is usually slight and rarely causes serious disability.

Detection of chronic simple glaucoma during these first two years, therefore, has become the goal of case-finding campaigns conducted by private and governmental agencies. Such campaigns, of necessity, must utilize screening technique which have a number of disadvantages, the most annoying of which is the very considerable number of false negatives and false positives. It is most important to realize, as a spokesman of the Public Health Service has very clearly stated, that screening is not diagnosing, but only a means of reducing the otherwise unmanageable number of potential suspects, to a group that can feasibly be given the thorough ophthalmological examination which is necessary for diagnosis.

Aside from these and other methods of case-finding, the glaucoma problem may be expected to be brought closer to a solution by continuation of current studies on the function of the aqueous outflow channels and on the aqueous chemistry in early cases. Carbonic anhydrase inhibitors have become a very valuable form of treatment as well as a most revealing investigative tool.

3:00

INTERMISSION TO VIEW EXHIBITS

4:00

"EARLY DIAGNOSIS OF DISEASE AT PLACE OF WORK"

KIEFFER D. DAVIS, M.D., Bartlesville, Oklahoma

4:30

"SELECTION OF THE TREATMENT FOR THE LIMB WITH FAILING CIRCULATION DUE TO ARTERIOSCLEROSIS"

ORMAND C. JULIAN, M.D., Chicago, Illinois

Associate Professor of Surgery, University of Illinois College of Medicine; Attending Surgeon, St. Luke's Hospital, Chicago; Consultant in Cardiovascular Surgery, Veterans Administration Hospitals, Hines, Illinois, and West Side Chicago

The treatment available for a limb with failing circulation is selected on the basis of the anatomical distribution of the obstructing lesions rather than per primam on the basis of the patient's age or the presence or absence of diabetes. It is always the aim of surgical treatment to restore the circulation wherever this is possible. Definitive surgery of the type which brings about this result can be applied to those patients having regional or segmental forms of arteriosclerosis in the lower aorta or in the arteries of the extremities. Selection of patients for restorative surgery depends on the clinical appearance of the extremity and the results of examination primarily. Secondly, final accurate selection is done on the basis of visualization of the arterial system by x-ray.

Patients in need of improved circulation either because of symptoms or impending ischemic changes in the extremity who are not suitable for a restorative operative procedure are considered for sympathectomy, a procedure which produces definite improvement in well selected cases although less so than reconstructive operations. Accurate selection of patients for sympathectomy has proven very difficult and at the present time the decision to do a sympathectomy depends more on the physical findings than it does on temporary sympathectomy through the use of novocaine.

Two additional groups of patients remain. These are patients with insufficient change due to ischemia to justify or require the use of either the two surgical measures mentioned above, and a group of patients whose ischemic changes have gone to the point at which neither operation can be expected to do any good. Supportive medical management is indicated in these patients. Those with mild symptoms may respond well to the cessation of smoking and the use of vasodilators. The patients with advanced changes must be managed for the diminution of pain and finally must be observed for the optimum time for amputation when this is required.

5:00

END OF FOURTH ASSEMBLY

A "REFRESHER COURSE" OF GREAT
VALUE TO PRACTITIONERS—THAT'S
THE MSMS ANNUAL SESSION!

* * *

EVERYONE YOU KNOW IS VIEWING
THE EXHIBITS—JOIN THEM!

Program of Sections

THURSDAY AFTERNOON

September 26, 1957

SECTION ON GASTROENTEROLOGY AND PROCTOLOGY

Meeting—5:00 to 6:00 p.m.—Rooms D and E, Civic Auditorium

Chairman: N. D. NIGRO, M.D., Detroit
Secretary: E. J. TALLANT, M.D., Detroit

Panel Discussion: "TREATMENT OF POLYPS OF THE RECTUM AND COLON"

LEO S. FIGIEL, M.D., Detroit, Michigan

Clinical Instructor of Radiology, Wayne State University College of Medicine; Vice Chairman, Division of Radiology, Grace Hospital

RAYMOND J. JACKMAN, M.D., Rochester, Minnesota

DON W. MCLEAN, M.D., Detroit, Michigan

Associate Clinical Professor of Surgery, Receiving Hospital; Chief, Rectal Division, Grace Hospital

For a number of years, it has been a generally accepted axiom that once a polyp is discovered in the rectum or colon, it should be removed. These polyps were seldom found until they had reached a size of about 1 cm., and their predisposition to malignant degeneration was recognized.

With modern improvements in the technique of radiologic examination of the colon, we find ourselves facing a somewhat different problem. The radiologist is now finding 2 and 3 mm. polyps in the colon, and commonly finding polyps of less than one half cm.

Our problem now is this—do these tiny polyps now carry the same malignant potential as the larger polyps, and does the presence of a small polyp in the colon justify its surgical removal?

We have studied 647 polyps treated in our practice, and found that 82 per cent of these were less than 1 cm. in diameter, and that in this group, malignant degeneration occurred in 0.4 per cent. Polyps from 1 to 2 cms. in diameter comprised 9 per cent of the cases, and the incidence of malignancy was 3.3 per cent. In those polyps over 2 cms. in diameter, the incidence of invasive carcinoma was 22 per cent.

Thus, it is apparent that the malignant potential of a polyp is dependent upon the size of the lesion. The removal of polyps of the colon is a major procedure, and carries a definite hazard for the patient. Where the mortality and morbidity incident to this surgery is greater than the malignant potential of the polyp, the removal of such lesions is not indicated.

C. ALLEN PAYNE, M.D., Grand Rapids, Michigan

Consultant in Pathology to United Memorial Hospital, Greenville; Sunshine Hospital and Mary Free Bed Hospital, Grand Rapids; Director of Laboratories and Pathologist, Ferguson Hospital, Grand Rapids

GERALD A. WILSON, M.D., Detroit, Michigan

Assistant Professor of Clinical Surgery, Wayne State University College of Medicine; Medical Director, Yates Memorial Clinic, Detroit; Chairman, Tumor Board, Dearborn Veterans Administration Hospital

SECTION ON GENERAL PRACTICE

Meeting—5:00 to 6:00 p.m.

Cocktails—6:30 p.m.

Dinner—7:30 p.m.

Continental Room, Pantlind Hotel

Chairman: F. P. RHOADES, M.D., Detroit

Secretary: F. C. BRACE, M.D., Grand Rapids

"GENERAL PRACTICE AND PSYCHIATRY"

BENJAMIN JEFFRIES, M.D., Detroit, Michigan

Member of Boards of Trustees and of Directors of Michigan Association for Epilepsy; President, Michigan Society of Neurology and Psychiatry

The national societies for General Practice and Psychiatry have established liaison. It is necessary that we review our needs and establish a program at the "grass roots" level.

SECTION ON OPHTHALMOLOGY

Meeting—5:00 to 6:00 p.m.—Room G, Civic Auditorium

Reception and Dinner—Peninsular Club

Chairman: B. C. WILDGEN, M.D., Muskegon

Secretary: H. A. DUNLAP, M.D., Detroit

"PRESENT TRENDS IN OPHTHALMOLOGY"

PETER C. KRONFELD, M.D., Chicago, Illinois

At this time, as well as during most periods in the past, definite trends can be recognized in ophthalmology. The faith in chemical agents controlling normal and abnormal functions has been given a big boost. Of the greatest practical value has been the discovery of new agents that inhibit the rate of aqueous formation. Such inhibitors may now be divided into different groups with different modes and, probably, different sites of actions. Very much in the foreground are the inhibitors of carbonic anhydrase of which diamox has had extensive clinical trial. Its indications and limitations have been recognized and have given impetus to a good deal of experimental and clinical work with various, proven or potential, carbonic anhydrase inhibitors.

Something related to the interest in diamox has been the recent trend toward sharper distinction between true angle-closure, on the one hand, and true open-angle glaucoma, on the other.

The investigation of chemical allies, that is therapeutic agents, has gone hand in hand with the recognition of new or relatively new specific poisons, such as certain phenegan derivatives and oxygen in high concentrations.

Ophthalmology has been participating in the present wave of concentration on atherosclerosis and its prevention. Rome's observations of significant therapeutic results with anticoagulants in diseases such as Kuhn-Junius disciform macular degeneration have been confirmed by other ophthalmologists.

Another definite trend is the concentration on the morphology, physiology and pathology of the outflow channels. The term ocular rigidity is acquiring a real, practical meaning.

In the field of retinal detachment surgery a very gratifying trend toward unifications of therapeutic principles can be recognized.

SECTION ON OTOLARYNGOLOGY

Meeting—5:00 to 6:00 p.m.—Reception and Dinner, Rooms 322 and 324, Pantlind Hotel

Chairman: W. K. LOCKLIN, M.D., Kalamazoo

Secretary: H. L. LEVETT, M.D., Lansing

"PROBLEMS IN OTOLARYNGOLOGIC PLASTIC SURGERY"

OSCAR J. BECKER, M.D., Chicago, Illinois

A discussion of plastic surgical procedures which apply to otolaryngology will be discussed. Rhinoplasty, Otoplasty and Skin Grafts will be the main topics covered. Diagrams and illustrations will be used to present the subject.

SECTION ON PUBLIC HEALTH AND PREVENTIVE MEDICINE

Meeting—5:00 to 6:00 p.m.—Room 222, Pantlind Hotel

Reception and Dinner—6:30 p.m.—Room 222, Pantlind Hotel

Chairman: J. D. MONROE, M.D., Pontiac

Secretary: J. K. ALTLAND, M.D., Lansing

"THE REVIVAL OF LEARNING IN PUBLIC HEALTH"

JOHN D. PORTERFIELD, M.D., Washington, D. C.

SECTION ON SURGERY

Meeting—5:00 to 6:00 p.m.—Red Room, Civic Auditorium

Chairman: E. T. THIEME, M.D., Ann Arbor

Secretary: H. M. BISHOP, M.D., Saginaw

"TREATMENT OF THE BREAST TUMOR DEVELOPING DURING PREGNANCY"

O. THERON CLAGGETT, M.D., Rochester, Minnesota

The development of a breast tumor during pregnancy offers many problems not associated with the development of a breast tumor under other circumstances. While carcinoma of the breast does not occur commonly during pregnancy, it is well recognized that it is a particularly serious condition when it does occur, and its appropriate treatment offers difficult decisions. Any surgical intervention offers some hazard of interrupting pregnancy in the pregnant woman. This hazard varies in the different stages of pregnancy and must be evaluated carefully. The special problems resulting from breast tumors developing during pregnancy and the management of these problems will be reviewed.

"VASCULAR COMPLICATIONS OF THE LOWER LIMBS DURING PREGNANCY"

ORMAND C. JULIAN, M.D., Chicago, Illinois

The major vascular complications of the lower extremities which occur during pregnancy relate to the venous system. Varicose veins of the legs are a very disturbing and frequent complication of pregnancy. The etiology of varicose veins during pregnancy is not entirely clear. There seems to be two elements. (1) A hormonal disturbance which produces relaxation of the vein walls; and (2) The mechanical element which is the result of intrapelvic obstruction to the venous drainage of the legs. Opinions as to the application of ordinary vein ligation and stripping of veins during pregnancy is very much divided and the reasons for and against surgery are very clear and worthy of analysis.

The tendency toward deep thrombophlebitis of the ilio-femoral systems during and immediately after pregnancy provides the second common vascular complication. Stasis appears to be a major factor as does the rather marked overdevelopment of the venous system in the pelvis which at a post partum period has become useless and must atrophy. The treatment of this thrombophlebitis differs in several ways from the usual management of deep thrombophlebitis in the non-pregnant patient.

"TREATMENT OF HYPERTHYROIDISM COMPLICATING PREGNANCY"

THEODORE O. WINSHIP, M.D., Washington, D. C.

THURSDAY EVENING

September 26, 1957

State Society Night

Ballroom, Pantlind Hotel

An evening of entertainment for all registrants, ladies and guests

Cabaret-style Dance and Floor Show

Host: Michigan State Medical Society

JULY, 1957

FRIDAY MORNING

September 27, 1957

Fifth Assembly

Black and Silver Ballroom, Civic Auditorium

Chairman: W. K. LOCKLIN, M.D., Kalamazoo

Secretary: W. R. SLENGER, M.D., Ann Arbor

A.M.
9:00

"PEDIATRICS FOR THE GENERALIST"

E. KEITH HAMMOND, M.D., Paoli, Indiana

Councilor, Third District, Indiana Medical Association; Councilor, Third District, Indiana Academy of General Practice; Co-chairman, Education Committee, Indiana Academy of General Practice

An analysis of records kept in a general practice indicates that children are brought to the doctor for relatively few different reasons. The vast majority of the clinical conditions encountered are relatively simple and innocuous. This fact seems pleasant indeed, but it is a trap which tends to lull the harried doctor into a false sense of security and make serious conditions easier to overlook. Many of these young patients are not even sick. Consequently the physician who is bent upon rendering the most service to his pediatric patients must maintain two states of mind. He must first be "preventive medicine minded." At the same time he must maintain a constant wariness in the presence of every sick child, regardless of how benign the illness might appear at first glance. These attitudes are of value in all medicine, but they are particularly valuable when dealing with children. Thoughts along these lines serve as a starting point for considerable discussion concerning the whole subject of pediatrics in the generalist's practice.

9:30 "BONE TUMOR PROBLEMS"

DAVID C. DAHLIN, M.D., Rochester, Minnesota

Consultant in Surgical Pathology, Mayo Clinic

Primary neoplasms of bone provide clinicians, surgeons, radiologists and pathologists with some of their most vexing diagnostic problems, partly because of their relative rarity.

Team work, applied to their diagnosis and management, has produced recent great advances in our knowledge of bone tumors. Some of the available information has not yet been widely disseminated. Awareness by the clinician of the signs and symptoms of bone tumors promotes earlier recognition of osseous pathology, and certain of these clinical features may give important clues as to the pathologic diagnosis. The roentgenologist who interprets the shadows produced by the lesional area supplies invaluable aid and sometimes an exact diagnosis. The pathologist responsible for the definitive histologic diagnosis must correlate his findings with those of the clinician and roentgenologist.

A classification of bone tumors that is useful to all members of the team comprises entities with clinical significance, especially from the standpoints of treatment and prognosis. Such a classification will be presented.

The biopsy specimen is of paramount importance. Its adequacy, which is vital to proper diagnosis and management, can be best insured by reference to the roentgenograms. Various methods of procuring tissue for biopsy are available and will be discussed.

The pathologist must determine whether the lesion is benign or malignant. In the latter case, his specific histologic diagnosis indicates whether the neoplasm is radio-sensitive or must be treated by ablative surgical means. In either case, treatment should be instituted without undue delay.

Many physicians have the erroneous impression that all malignant tumors of bone have a practically hopeless prognosis. Data will be presented to show that a substantial cure rate may be anticipated for many of these sarcomas. This fact further emphasizes the importance of instituting prompt, appropriate therapy.

10:00 INTERMISSION TO VIEW EXHIBITS

11:00 "SOME REMARKS ON IMMUNOBIOLOGY OF SOME TUMORS OF THE SKIN"

LEON GOLDMAN, M.D., Cincinnati, Ohio

Professor of Dermatology, College of Medicine, University of Cincinnati; Director of Dermatology, Cincinnati General Hospital and Children's Hospital

Recently, there has been renewed research interest in the fascinating study of immunity of cancer in man. There will be a brief review of some of the data regarding possible antibody response to local tumor invasion. The type of tumor selected, perhaps unwisely, for our study in this field is the multiple basal cell malignancy of the skin. These locally invasive lesions especially over the face can be destructive and disfiguring even without therapy. There is obviously a definite need for some program of prophylaxis. To date, no such program is possible. Our experiments with skin testing, injections of serum, and injections of so-called tumor vaccine extracts will be presented. The purely investigative nature of these unsuccessful experiments will be emphasized strongly. Of clinical importance is the early recognition and early therapy of such tumors and the continued observation of such patients.

11:30 "WIRE BRUSH SURGERY"

JAMES W. BURKS, JR., M.D., New Orleans Louisiana

Associate Professor of Medicine, Dermatology, Tulane; Head of Dermatology (Tulane Unit), Charity Hospital, New Orleans

Wire brush surgery, dermabrasion or surgical planing of the skin has received world-wide recognition as the most effective treatment of acne scars and certain other cosmetic defects of the skin.

The major portion of this presentation is a motion picture in color of planing a patient with acne scars, step by step, from the pre-operative through the three months post-operative period, and covers not only the basic principles, equipment and actual technique of planing, but also periodic clinical and pathologic correlations.

Appraisal of this subject and evaluation of results I have obtained during the past five years in over 1500 planings will be given.

12:00 END OF FIFTH ASSEMBLY

FRIDAY NOON

September 27, 1957

12:00 noon to 1:00 p.m.

Discussion Conference

Black and Silver Ballroom, Civic Auditorium

Leader: PERRY C. GITTINS, M.D., Detroit

Participants: LEO H. BARTEMEIER, M.D., Baltimore, Maryland; SAMUEL BELLET, M.D., Philadelphia, Pennsylvania; RICHARD J. BING, M.D., St. Louis, Missouri; JAMES W. BURKS, JR., M.D., New Orleans, Louisiana; DAVID C. DAHLIN, M.D., Rochester, Minnesota; LEON GOLDMAN, M.D., Cincinnati, Ohio; E. KEITH HAMMOND, M.D., Paoli, Indiana; HANS H. HECHT, M.D., Salt Lake City, Utah; ADELAIDE M. JOHNSON, M.D., Rochester, Minnesota; ROBERT L. NOVY, M.D., Detroit, Michigan; WALTER L. PALMER, M.D., Chicago, Illinois; ROBERT J. SCHNECK, M.D., Detroit, Michigan.

FRIDAY AFTERNOON

September 27, 1957

Sixth Assembly

Black and Silver Ballroom, Civic Auditorium

Chairman: COLEMAN MOPPER, M.D., Detroit
Secretary: W. T. KRUSE, M.D., Grand Rapids

2:00 Panel on "THE PROBLEM OF THE DESTRUCTIVE IMPULSE IN THE PRACTICE OF MEDICINE"

LEO H. BARTEMEIER, M.D., Baltimore, Maryland
Medical Director of the Seton Psychiatric Institute; Chairman of the Council on Mental Health of the American Medical Association

ADELAIDE M. JOHNSON, M.D., Rochester, Minnesota
Clinical Professor of Psychiatry, University of Minnesota

This problem may also be described as the unintentional struggle of patients against their physicians. The destructive impulse is an unconscious force working more or less in opposition to their recovery. This situation has led to the assumption that some patients enjoy their illness or do not wish to get well. Despite correct diagnosis and proper treatment some patients fail to improve. Others improve for a brief period, only to suffer a recurrence of their original symptoms. Still others react to prescribed treatment in an opposite way to what is expected.

3:00 FINAL INTERMISSION TO VIEW EXHIBITS

3:30 "GASTROINTESTINAL HEMORRHAGE"

WALTER L. PALMER, M.D., Chicago, Illinois
Richard T. Crane Professor of Medicine, University of Chicago

In this paper, the causes of gastrointestinal hemorrhage will be reviewed with a brief discussion of differential diagnosis. The treatment of acute and chronic hemorrhage will be reviewed together with a consideration of measures for the alleviation of the underlying basic diseases.

4:00 Panel on "WHAT'S NEW IN HEART DISEASE" (Followed by meeting of Section on Medicine)

Moderator: ROBERT L. NOVY, M.D., Detroit, Michigan

Delegate, American Medical Association; AMA Council on Medical Service; Commissioner, Detroit Board of Health; Trustee, Michigan Hospital Service

Participants:

SAMUEL BELLET, M.D., Philadelphia, Pennsylvania

Professor of Clinical Cardiology, Graduate School of Medicine; Director, Division of Cardiovascular Diseases, Graduate Hospital, University of Pennsylvania; Director, Division of Cardiology, Philadelphia General Hospital

RICHARD J. BING, M.D., St. Louis, Missouri

Professor of Medicine, Washington University; Chief of Washington University Service at Veterans Administration Hospital, St. Louis, Missouri

HANS H. HECHT, M.D., Salt Lake City, Utah

L. E. Viko Professor of Cardiology, Department of Internal Medicine, University of Utah College of Medicine

ROBERT J. SCHNECK, M.D., Detroit, Michigan

Chief, Department of Medicine, Harper Hospital; Clinical Professor of Medicine, Wayne State University College of Medicine

Program of Sections

FRIDAY AFTERNOON

September 27, 1957

SECTION ON ANESTHESIOLOGY

Meeting—3:00 p.m.—Sadler Lounge, Pantlind Hotel

Reception and Dinner—6:30 p.m.—Peninsular Club

Chairman: R. B. SWEET, M.D., Ann Arbor

"MICHIGAN MEDICAL SERVICE AND THE ANESTHESIOLOGISTS OF MICHIGAN"

L. FERNALD FOSTER, M.D., Detroit

President, Michigan Medical Service; Secretary, Michigan State Medical Society

JAY C. KETCHUM, Detroit

Executive Vice President, Michigan Medical Service

SECTION ON DERMATOLOGY AND SYPHILOLOGY

Meeting—5:00 to 6:00 p.m.—Room 222, Pantlind Hotel

Chairman: WM. T. KRUSE, M.D., Grand Rapids

Secretary: COLEMAN MOPPER, M.D., Detroit

"WIRE BRUSH SURGERY—AN INVESTIGATIVE THERAPEUTIC MODALITY"

JAMES W. BURKS, JR., M.D., New Orleans, Louisiana

The early acceptance by the American dermatologist of surgical planing as an effective tool in the treatment of acne scars and certain other cosmetic defects has led to a widespread re-awakening in cosmetic dermatology. Although, as expected, planing has its therapeutic limitations, experience in the use of this tool in various diseases of the skin indicates a wide application in dermatological research.

Planing provides an unlimited supply of wounds in human subjects for clinical as well as laboratory study. Experiences in the study of some of these subjects will include: a new concept of wound healing, histopathology of recurrent lupus erythematosus, use of pigment stimulators and inhibitors, allergic reaction of planed skin, growth of certain skin tumors, alteration of collagen, sources of regenerative tissue, alteration in anatomy and chemistry of epidermal and dermal cells, anatomy and physiology of appendages, effects of freezing, active acne vulgaris, pre-cancerous, aged skin and others.

Exemplary lantern slides will be presented.

SECTION ON NERVOUS AND MENTAL DISEASES

Meeting—5:00 to 6:00 p.m.—Schubert Room, Pantlind Hotel

Reception and Dinner—6:00 p.m.—Schubert Room, Pantlind Hotel

Chairman: W. R. SLENGER, M.D., Ann Arbor

Secretary: S. C. MASON, M.D., Ann Arbor

Panel Discussion

"PATIENT-CENTERED MEDICAL CARE"

Participants: LEO H. BARTEMEIER, M.D., Baltimore, Maryland; ADELAIDE M. JOHNSON, M.D., Rochester, Minnesota

SECTION ON PATHOLOGY AND THE MICHIGAN PATHOLOGIC SOCIETY

Meeting—3:00 p.m.—Continental Room, Pantlind Hotel

Reception and Dinner—6:30 p.m.—Continental Room, Pantlind Hotel

Chairman: E. R. JENNINGS, M.D., Detroit

"BONE TUMOR PROBLEMS"

DAVID C. DAHLIN, M.D., Rochester, Minnesota

SECTION ON MEDICINE

Meeting—4:00 to 6:00 p.m.—Black and Silver Ballroom, Civic Auditorium

Chairman: J. M. KAUFMAN, M.D., Detroit

Secretary: J. W. HALL, M.D., Traverse City

(See program above)

P.M.

6:00 End of Scientific Assembly and of the 1957 Annual Session

1958 SESSION MSMS

The next Annual Session of MSMS will be held in Detroit at the Sheraton-Cadillac Hotel

Wednesday-Thursday-Friday

October 1-2-3, 1958

Annual Reports

ANNUAL REPORT OF POSTGRADUATE MEDICAL EDUCATION COMMITTEE—1956-1957

The Postgraduate Medical Education Committee met twice during the year, on January 17 and May 24. The members of the Committee have faithfully attended these meetings, and have shown great interest in the planning for postgraduate medical education programs for the membership of the state society.

During the year a review of present centers has been made, and consideration is being given to the establishment of new centers for extramural programs.

The Subcommittee on Audio-Visual Aids is continuing the study of these educational methods. The Executive Office is cooperating in the process of compiling available teaching films for lay as well as medical audiences.

The content of the teaching program for the past year was reviewed and subjects for 1957-58 extramural program were suggested. The Committee directed the members of the Committee who reside in Ann Arbor to develop the autumn 1957 program.

The Chairman reported on the extramural program in the various teaching centers:

The subjects presented during the year were:

Fall Program

Acute abdominal trauma
Accident prevention in children
Adrenalin insufficiency in the medical and surgical patient
Changing concepts in treatment of Cancer
Indications and contra-indications for hysterectomy
Management of acute head trauma
Maxillo-facial aspects of trauma
Neurosurgical aspects of trauma
Ophthalmological aspects of trauma
Plastic surgical care of head and neck
Symposium on industrial medicine
Traumatic injuries from the neurosurgical standpoint
Treatment of advanced carcinoma of breast

Spring Program

Accident prevention in children
Changing concepts in treatment of cancer
Chemotherapy of leukemia and lymphoblastoma
Hormonal therapy of malignant diseases
Neo-natal Care. Panel discussion
Neurosurgical traumatic injuries
Plastic surgical correction of congenital and acquired deformities
Psychiatric techniques of use to all physicians
Tranquilizers

Attendance—Extramural Program

Center	Fall 1956	Spring 1957	1956-57
Alpena	18	16	23
Battle Creek	51	45	70
Bay City	23	21	36
Cadillac	—	23	23
Flint	86	30	96
Jackson	73	52	75
Lansing	44	50	82
Muskegon	70	62	82
Port Huron	51	65	88
Traverse City	36	—	36
Upper Peninsula			
Escanaba	16	20	24
Houghton-Calumet	12	13	17
Iron Mountain	16	14	18
Ironwood	16	15	19
Marquette	27	20	31
Menominee	26	28	32
Sault Ste. Marie	22	9	23
	587	483	775

University of Michigan Medical School

Intramural Courses	Attendance
Anatomy	30
Basic Sciences	25
Clinical Exercises for Practitioners	36
Clinical Internal Medicine	37
Diagnostic Radiology	29
Diseases of Blood and Blood-forming Organs	5
Diseases of the Gastrointestinal Tract	8
Diseases of the Heart	20
Electrocardiographic Diagnosis	32
Foreign Physicians	9
Interns, Assistant Residents and Residents	367
Metabolism and Endocrinology	35
Obstetrics and Gynecology	40
Ophthalmology	127
Otolaryngology	24
Pediatrics	32
Pulmonary Diseases	17
Radio-active Isotopes, Clinical Use of	19
Recent Advances in Therapeutics	25
Surgical Pathology Slides and Miscellaneous	33
Rheumatology	9

959

The following named physicians participated in the extramural postgraduate teaching program: Shirley Austin, M.D.; Arnold Axelrod, M.D.; Jere M. Bauer, M.D.; Samuel J. Behrman, M.D.; Robert E. L. Berry, M.D.; Hardee Bethea, M.D.; H. Waldo Bird, M.D.; Duncan A. Cameron, M.D.; Edward A. Carr, Jr., M.D.; Reed O. Dingman, D.D.S., M.D.; Bruce D. Graham, M.D.; John M. Henderson, M.D.; Jack Hertzler, M.D.; Robert S. Knighton, M.D.; George H. Lowrey, M.D.; John H. Packer, M.D.; Herbert E. Pedersen, M.D.; Richard C. Schneider, M.D.; Richard W. Stander, M.D.; Charles S. Stevenson, M.D.; David H. P. Streeten, M.D.; Robert B. Sweet, M.D.; A. Burgess Vial, M.D.; Paul V. Woolley, Jr., M.D.

Upon recommendation of the Committee on Postgraduate Medical Education, the Michigan Foundation for Medical and Health Education granted certificates of Associate Fellowship in Postgraduate Medical Education to twenty-one physicians and certificates of Fellowship to fourteen physicians.

The Michigan Clinical Institute was held in Detroit on March 13, 14 and 15. The meeting was well attended, the total registration of physicians was 1,654.

Wayne State University College of Medicine

Enrollment in intramural postgraduate courses:

Name of course	First Quarter	Attendance
Anesthesiology		3
Biochemistry		2
Dermatology		3
Electrocardiography		13
Ophthalmology		8
Pathology (Gynecologic)		36
(Neuro-)		6
Radiology (Physics of)		1
(Diagnostic)		5
(X-Ray Film Conference)		1
(Radiation Therapy)		8
Surgery		11
(Pathological Conference)		3
	Second Quarter	
Dermatology		1
Electrocardiography		4
Microbiology		2
Pathology (Beginning Hematology)		7
(Dermato-)		6
(Neuro-)		6
Radiology (Diagnostic)		4
(X-Ray Film Conference)		2
(Radiation Therapy)		35
(Physics of)		2
Surgery (Seminar)		13

ANNUAL REPORTS

Third Quarter

Anatomy (Thorax and Abdomen).....	14
(Head and Neck).....	5
(Extremities).....	8
Dermatology (Mycology).....	2
Medicine (Seminar).....	16
Pathology (Forensic).....	11
Physiological Chemistry.....	2
Radiology (Diagnostic).....	7
(X-Ray Film Conference).....	1
(Radiation Therapy).....	37
(Physics of).....	4
Surgery (Seminar).....	6

The Committee wishes to express its appreciation for the support given to this program by the State Department of Health, and for the many helpful suggestions of Dr. Goldie B. Corneliuson, Chief of the Maternal and Child Health Section.

The excellent cooperation of Wayne State University College of Medicine and the University of Michigan Medical School and their faculties, together with the work of the Councilors and chairmen in arranging for local programs, has contributed immeasurably to the functioning of the extramural program. The Committee is deeply appreciative of all these efforts.

Respectfully submitted,

JOHN M. SHELDON, M.D., *Chairman*

D. A. CAMERON, M.D.

E. I. CARR, M.D.

B. R. CORBUS, M.D.

M. A. DARLING, M.D.

A. C. FURSTENBERG, M.D.

J. R. HEIDENREICH, M.D.

D. H. KAUMP, M.D.

R. M. MCKEAN, M.D.

D. W. MCLEAN, M.D.

F. P. RHOADES, M.D.

J. M. ROBB, M.D.

G. H. SCOTT, Ph.D.

E. F. SLADEK, M.D.

H. A. TOWSLEY, M.D.

E. G. UPJOHN, M.D.

H. H. CUMMINGS, M.D., *Advisor*

rheumatic fever. There were 243 re-examinations of old cases, making a total of 504 patients seen. As in the past, several physicians who have given their time to various Rheumatic Fever Diagnostic Centers were awarded postgraduate fellowships at St. Francis Sanatorium at Roslyn, Long Island, New York, as follows: Gordon Manson, M.D., Detroit; Walter F. Kujawski, M.D., Detroit; Bernard H. Siebers, M.D., Grand Rapids; H. Mark Hildebrandt, M.D., Ann Arbor; and Craig E. Booher, M.D., Grand Rapids.

At the present time and for several years the work of the Committee has been entirely supported by the Michigan Heart Association. The membership of the Committee wishes to express its deep appreciation of this support and of the support and aid given to it by The Council of the Michigan State Medical Society, the Executive Committee of The Council, MSMS, and the staff and officers of the executive office of the MSMS.

The Chairman of the Committee also wishes to express his appreciation for the counsel and work of the various members of the Committee, and particularly to Leon DeVel, M.D.

Respectfully submitted,

S. T. HARRIS, M.D., *Chairman*

R. E. FISHER, M.D., *Vice Chairman*

E. W. ADAMS, M.D.

J. G. BIELAWSKI, M.D.

R. P. BOLTON, JR., M.D.

B. M. BULLINGTON, M.D.

CARLETON DEAN, M.D.

LEON DEVEL, M.D.

T. B. HILL, M.D.

C. L. HOOPERLAND, M.D.

F. D. JOHNSON, M.D.

J. D. LITTIG, M.D.

N. L. MATTHEWS, M.D.

R. J. MCGILLICUDDY, M.D.

A. E. PRICE, M.D.

W. B. PROTHRO, M.D.

H. H. RIECKER, M.D.

E. E. SCHUMACHER, JR., M.D.

D. S. SMITH, M.D.

B. J. SWEENEY, M.D.

R. D. TUPPER, M.D.

FRANK VAN SCHOICK, M.D.

MR. JAMES GERITY, JR., *Advisor*

THOMAS FRANCIS, JR., M.D., *Advisor*

MR. E. T. GUY, *Advisor*

L. FERNALD FOSTER, M.D., *Secretary*

ANNUAL REPORT OF RHEUMATIC FEVER CONTROL COMMITTEE—1956-1957

The Rheumatic Fever Control Committee has met five times during year as follows: September 5, 1956, December 5, 1956, February 6, 1957, March 20, 1957, and May 22, 1957.

During these sessions, the Committee has reviewed the reports from the diagnostic centers, received the reports of the Medical Coordinator and directed his activities. Dr. Leon DeVel resigned as Medical Coordinator of the Committee effective February 1, 1957. The Committee is at present attempting to find a replacement.

Two old Desk Reference Cards for rheumatic fever were revised and one new Desk Reference Card was prepared by the Committee.

The old pamphlet "Nine Questions and Answers for Parents" was extensively revised and reprinted as "Ten Questions and Answers for Parents."

The pamphlet "The Cardiac and/or Rheumatic Child in School" has proved very popular with school teachers, and a large reprinting (25,000 copies) was ordered for additional circulation.

The most important part of the Rheumatic Fever Programs remains the many Rheumatic Fever Diagnostic and Consultation Centers. Because of varying local conditions, there are many minor differences in the operation of the various Centers. However, they all follow the basic idea that patients are seen only on referral from doctors of medicine who wish aid and guidance in the diagnosis of some of their cases. During the calendar year 1956, there were 261 new referrals to the clinics, of which 143 were diagnosed

ANNUAL REPORT OF MATERNAL HEALTH COMMITTEE—1956-1957

The State Maternal Health Committee has had two meetings in 1956-1957, the first on November 14 at the Sheraton-Cadillac Hotel in Detroit, and the second on April 11 at Blodgett Hospital in Grand Rapids.

We are continuing our Maternal Health audit under the able direction of Vice Chairman, Dr. Harold Ott. The material on the first five-year study is ready for publication. We hope that we may organize short articles for the MSMS JOURNAL. These will be arranged with the Editor.

This year, we have attempted to establish ground work for the creation of activities which will supplement our Maternal Mortality audit. Dr. Norman Miller has served as Chairman of the Evaluation Committee and has been an excellent counselor for our group; Dr. C. E. Toshach is organizing a Perinatal Mortality study; Dr. Viola Brekke is working toward the development of a Maternal Tissue Registry which is now in operation; Dr. E. Freeman Hersey is attempting to coordinate the Maternal Health Committee with a general lay educational program throughout the state. Dr. C. M. Bell is organizing a program for cooperation with the local

county medical societies and attempting to create better understanding between the state committee and local maternal health committees.

The group feels that tremendous strides have been made by the physicians in the state in reducing mortality. Our study of maternal deaths must, by all means, be continued. However, we are impressed by the need of improving maternal health in the obstetrical and post-partum patients. We are planning a study of such problems with a view to directing better adult education and a more thorough understanding of the problem. We all feel that the need is there but we are uncertain as to how to proceed. By study groups and discussions, we hope to arrive at some concrete suggestions.

We are happy that House Bill 347 has been passed. The Committee feels that this makes our study more secure.

A June meeting is planned for Lansing, provided our subcommittee chairmen feel that there is anything to be accomplished by this session.

Respectfully submitted,
 F. A. JONES, JR., M.D., *Chairman*
 H. A. OTT, M.D.
 F. W. BALD, M.D.
 C. A. BEHNEY, M.D.
 C. M. BELL, M.D.
 H. R. BRUKARDT, M.D.
 G. B. CORNELIUSON, M.D.
 A. L. FOLEY, M.D.
 W. F. GOINS, M.D.
 E. FREEMAN HERSEY, M.D.
 E. S. HOFFMAN, M.D.
 W. C. LAMBERT, M.D.
 H. W. LONGYEAR, M.D.
 A. G. McCUAIG, M.D.
 N. F. MILLER, M.D.
 H. W. SILL, M.D.
 C. S. STEVENSON, M.D.
 D. W. THORUP, M.D.
 C. E. TOSHACH, M.D.
 P. E. SUTTON, M.D.
 KATHRYN D. WEBURG, M.D.
 H. R. WILLIAMS, M.D.
 VIOLA G. BREKKE, M.D., *Advisor*
 MARY LOU BYRD, M.D., *Advisor*
 J. V. FOPEANO, M.D., *Advisor*

ANNUAL REPORT OF TUBERCULOUS CONTROL COMMITTEE—1956-1957

The Tuberculosis Control Committee met on January 11, 1957, and again on April 3, 1957. The principal items brought up for discussion were as follows:

Tuberculosis Control Legislation:—The Committee recommended that the present law regarding tuberculosis control be strengthened by amendment to include: (1) adequate control of committed cases; (2) adequate control of uncooperative suspects; (3) designation of facilities at Gaylord as the site for hospitalization for recalcitrant patients; and (4) provision for a Board of Review composed of three physicians to advise probate courts on commitment proceedings and to review committed cases on appeal.

Proposal for Closing of Tuberculosis Sanatoria:—Dr. Isbister reported on the proposal that the State close tuberculosis sanatoria as the reduction of tuberculosis patients may allow, as suggested in the report on tuberculosis control made by the Public Administration Service to the Senate Committee on Finance and Appropriations. This Committee recommended that the State should continue to make beds available, if needed, on a reservoir basis. If any further action was to be taken by the State in this regard, the Committee requested that it be informed.

Budget proposals:—The proposed budget of the Michigan Department of Health regarding tuberculosis hospital care, follow-up and expanded tuberculosis control was reviewed in detail and its principles approved *in toto*, except for the item pertaining to the Medical Audit of Tuberculosis Patients. The Committee accepted this budget more with regard to principles than to actual amounts in dollars and cents.

Role of private physician:—The Committee reaffirmed that the effectiveness of future case finding and treatment of tuberculosis is dependent largely upon the private practitioner in the State of Michigan.

Program of Thoracic Surgery:—There was a lengthy discussion on the present program of thoracic surgery in the various State and county sanatoria with consideration of alternate plans which might benefit both the state and the patient, particularly the program of the Michigan Tuberculosis Sanatorium Commission for consolidation of thoracic surgery in state tuberculosis sanatoria. It was finally recommended that changes at the present time would be both economically and professionally unsound.

Utilization of "Excess" Tuberculosis Beds:—The Tuberculosis Control Committee was advised that the 1956 MSMS House of Delegates had authorized the appointment of a committee to study the use of excess beds in tuberculosis sanatoria. The Committee requested direction as to whether it should undertake the study of this situation. In February the Chairman was advised that the President of the MSMS had decided to appoint the Tuberculosis Control Committee as the group to handle the resolution. A special meeting was, therefore, called for April 3, at which this matter was discussed. A very lengthy discussion followed and there was great difference of opinion among the Committee members. It was difficult to reach a uniform decision, but the following conclusions were finally made.

The Committee recognized that there was a continual decline in tuberculosis hospitalization requirements for the State of Michigan. On the other hand, the Committee recognized that there were many persons with active tuberculosis who were not hospitalized. It was felt that as much influence as possible should be brought to bear on the state legislature to enact an adequate law for the management of recalcitrant patients so that many of these beds might be filled. Case finding, of course, should continue at an accelerated pace in an effort to reduce further the number of patients with pulmonary tuberculosis.

The Committee endorsed the following recommendations to strengthen the economic position of the state tuberculosis hospitals by:

- (1) requiring that state-at-large patients be hospitalized at a state sanatorium whenever bed space is available;
- (2) directing that veterans who meet county residence requirements should be treated as county charge patients, rather than state-at-large patients; and that veterans who have not established residences continue to be provided hospitalization at state expense;
- (3) providing that selected tuberculosis patients in mental hospitals may be transferred to State tuberculosis hospitals as state-at-large patients when in the opinion of the medical directors of mental and tuberculosis hospitals the transfer would be in the best interest of the patient.
- (4) providing that selected corrections department prisoners with tuberculosis may be transferred to the State tuberculosis hospitals as State-at-large patients when in the opinion of the director of the said department and the director of the State tuber-

culosis department hospital that transfer would be in the best interest of the patient and the public;

5) establishing an effective security unit of the tuberculosis sanatorium in requiring that all patients committed by court order be isolated and treated in this unit or in a county tuberculosis sanatorium, if practicable.

Action should be taken to provide for the adjustment of tuberculosis care provisions to patient needs by: (1) authorizing the State Health Commissioner, with concurrence of the State Council of Health, to declare a sanatorium or any portion of a sanatorium to be in excess of reasonable tuberculosis hospitalization needs of any area and that, on this basis, the Commissioner may withhold state subsidy from any sanatorium so designated, or reduce the number of beds approved for subsidy, making a proportionate reduction in the allowable per diem costs for any patients hospitalized at state expense; (2) stipulating that when state action results from the closing or reduced operations of the sanatorium, funds be provided by the legislature to maintain diagnostic and out-patient services for tuberculosis in the area concerned.

Authorization of counties and cities to utilize excess sanatorium beds for other purposes met with a variance of opinion by members of the Committee. It was finally recommended that counties and cities be given the authority to use sanatorium beds or sanatoria for the care of tuberculosis or other public health responsibilities, such as mentally ill, indigent, alcoholic and tuberculosis patients in state prisons.

Respectfully submitted,
 R. L. RAPPORT, M.D., *Chairman*
 ABRAHAM BECKER, M.D.
 P. T. CHAPMAN, M.D.
 W. N. DAVEY, M.D.
 J. L. EGGLE, M.D.
 J. L. ISBISTER, M.D.
 LOUIS JAFFE, M.D.
 L. R. NELSON, M.D.
 R. A. RASMUSSEN, M.D.
 W. F. STEPHENSON, M.D.
 A. F. STILLER, M.D.
 C. J. STRINGER, M.D.
 S. A. YANNITELLI, M.D.
 G. T. MCKEAN, M.D., *Advisor*

ANNUAL REPORT OF COMMITTEE ON MENTAL HEALTH—1956-1957

During the year ending May, 1957, the Committee on Mental Health held three general meetings. The Subcommittee on Alcoholism was enlarged to include narcotic addiction.

Members participated in the following meetings: Third Annual Conference on Mental Health, American Medical Association at Chicago; Preventive Medicine Committee Meeting of Michigan State Medical Society; and Meetings with Michigan Society of Neurology and Psychiatry.

The Committee worked with The Council on Mental Health of the American Medical Association on a survey of the use of tranquilizing drugs in the State of Michigan.

The importance of the care of individuals having convulsive disorders was again re-emphasized, and the Committee offered to furnish speakers on this subject to county medical societies.

A number of mental health bills, which had been introduced in the state legislature, were studied by the Committee. Its conclusions on these bills were submitted for the information of the Legislative Committee.

It noted that the program is lagging concerning county medical societies having Mental Health Committees, and offered assistance to county medical societies in developing programs in the field of mental health.

We considered the "Resolution on Hospitalization of Patients with Alcoholism" as adopted by The Council of the American Medical Association and printed in the October 20, 1956, issue of the *Journal of the American Medical Association*. This resolution deals with the problem of the hospitalization of patients with a diagnosis of alcoholism. Our Committee felt this resolution should be publicized to a greater extent.

The Committee offered to help the Michigan Society of Neurology and Psychiatry in its sponsoring of a divisional meeting of the American Psychiatric Association in October, 1959.

At present the Committee is busy assembling material on mental health for the October, 1957, issue of the *JOURNAL OF THE MICHIGAN STATE MEDICAL SOCIETY*.

The Chairman wishes to thank the members of the Committee on Mental Health for their interest and support, and it is our hope that the activities of the Mental Health Committee have been of some assistance to the Michigan State Medical Society.

Respectfully submitted,

I. A. LACORE, M.D., *Chairman*
 Z. S. BOHN, M.D., *Vice Chairman*
 H. W. BIRD, M.D.
 P. N. BROWN, M.D.
 W. E. CLARK, M.D.
 F. P. CURRIER, M.D.
 J. M. DORSEY, M.D.
 T. J. HELDT, M.D.
 L. E. HIMLER, M.D.
 M. H. HOFFMANN, M.D.
 R. F. KERNKAMP, M.D.
 M. H. MARKS, M.D.
 P. A. MARTIN, M.D.
 F. O. MEISTER, M.D.
 C. J. MUMBY, M.D.
 W. H. OBENAUF, M.D.
 R. W. WAGGONER, M.D.
 E. M. WILLIAMSON, M.D.
 H. B. ZEMMER, M.D.

ANNUAL REPORT OF IODIZED SALT COMMITTEE—1956-1957

Two meetings of the Iodized Salt Committee were held during the year, one on December 14, 1956 and the second on February 8, 1957.

The theme of these meetings was to promote good will and cooperation between the Salt Producers Association and our Committee. At the meeting on December 14, our guests were: Frank J. Madden, General Manager of the Salt Institute of Chicago; Lloyd McBride, Attorney for the Salt Producers Association; Charles B. Moore, President of the Morton Salt Company; J. H. Wright of the Salt Producers Association; and Dr. J. K. Altland of the Michigan Department of Health.

Dr. Towsley presented for the guests the history of our Committee and its past accomplishments. Dr. Towsley also summed up the work presently facing our Committee. Dr. Moehlig reported on the experience in Switzerland, Canada, and South American countries in regard to iodine deficiencies and goiter.

Dr. Blodgett spoke of the changing incidence of thyroid surgery and Dr. Altland reviewed the results of our surveys of endemic goiter in Michigan school children.

Dr. Brush spoke of the responsibility of the Medical Society to keep goiter at a low level, and asked the attitude of the salt producers toward making iodized salt compulsory in Michigan.

Each of our guests was heard from, and a general discussion of the problem followed. A subcommittee was appointed consisting of Messrs. J. H. Wright and William J. Burns to integrate and develop an educational program regarding the need for iodized salt.

We believe that during the past year we have made strides in the right direction and expect that they will bear fruit in the next few years.

Respectfully submitted,

B. E. BRUSH, M.D., *Chairman*
H. A. TOWSLEY, M.D., *Vice Chairman*
L. A. BERG, M.D.
J. B. BLODGETT, M.D.
J. R. CARNEY, M.D.
R. C. MOEHLIG, M.D.
R. L. RAPPORT, M.D.
R. L. WAGGONER, M.D.

ANNUAL REPORT OF THE SCIENTIFIC RADIO COMMITTEE—1956-1957

During the year, forty programs for lay education were tape-recorded and distributed over nine radio stations throughout the state. The stations carrying the programs were: WUOM, WFUM, WPAG, WAGN, WBRN, WDET, WLDM, and WMDN. The topics and their date of original distribution and the members of the Michigan State Medical Society who presented the topics are as follows:

1956		
10- 5	The Childless Couple	S. J. Behrman
10-12	The Importance of Prenatal Care	Tommy Evans
10-19	Preparing the Family for the New Baby	E. H. Watson
10-26	What is the Meaning of Vomiting in the Baby?	Robt. Heavenrich
11- 2	What is the Meaning of Diarrhea in the Baby?	Wm. Stewart, Jr.
11- 9	Why Does Your Baby Need "Shots"?	George Lowrey
11-16	Muscular Dystrophy	Russell DeJong
11-23	The Menopause	D. Tamblyn
11-30	Health Investments for Advancing Years	S. E. Miller
12- 7	Why You Need an Annual Health Examination	John Rodger
12-14	Rheumatism	Wm. Mikkelsen
12-21	Advances in the Treatment of Arthritis	Wm. Caster
12-28	Backache	Chas. Frantz
1957		
1- 4	Research and the March of Dimes	J. L. Wilson
1-11	What is being done for the Polio Patient Today?	D. G. Dickinson
1-18	Body Functions and the Endocrine Glands	D. H. Streeten
1-25	The Thyroid Gland	Wm. Beierwaltes
2- 1	Trends in the Treatment of Diabetes	Stefan Fajans
2- 8	Coronary Heart Disease	Park Willis
2-15	Rheumatic Heart Disease	Aaron Stern
2-22	How to Live with Your Heart Disease	F. D. Johnston
3- 1	High Blood Pressure	Sibley Hoobler
3- 8	What Can You Do for the Victim of an Automobile Accident?	C. Thomas Flotte
3-15	What Can You Do for the Burned Victim?	Robt. E. L. Berry
3-22	What Can You Do for the Person Who Swallows Poison?	Craig Booher
3-29	What Can You Do to Prevent Accidents in the Home?	Robert Trimby
4- 5	Early Warning Signs of Cancer of the Female Generative Organs	T. N. Evans

4-12	Breast Cancer	M. S. DeWeese
4-19	Cancer of the Blood	Frank Bethell
4-26	Cancer Research	H. B. Latourette
5- 3	What Is Cerebral Palsy?	Kenneth Magee
5-10	What Is Being Done for the Cerebral Palsied?	Richard Allen
5-17	The Problem of Sex Education	Stuart Finch
5-24	The Emotional Aspects of Epilepsy	H. Waldo Bird
5-31	What Can Be Done for the Hard of Hearing?	James Maxwell
6- 7	Recent Advances in the Treatment of Appendicitis	Paul Hodgson
6-28	Hay Fever	Robert Lovell
7- 5	Summer Itch	Richard Harrell

The attempt was made again this year to place certain programs on the air to coincide with the activities of national or state agencies; i.e., cancer month, heart month, and so forth.

This Committee would like to call to your attention that all of these broadcasts are recorded and are available to any county society or any member of the state society who would like to use them for rebroadcasts, their local radio stations, or as source material in talks that might be given to local lay groups, including parent-teacher associations, the local Grange, or other lay organizations.

This Committee would like to call your attention to the fact that we would like to broaden the number of stations over which these programs are distributed. To do this, we urge the members of the county societies to consult with their local radio stations and make an effort to obtain the service of the station for broadcasting these programs. Further information of the procurement of these tape recordings can be obtained by writing to the Office of Public Relations of the Michigan State Medical Society or to Station WUOM at the University of Michigan Broadcasting Service, Ann Arbor.

This Committee has not had an annual meeting during the year. However, one is scheduled for July, 1957, to compile the program for the year of 1957-58.

Respectfully submitted,

HARRY A. TOWSLEY, M.D., *Chairman*
CARL B. BEEMAN, M.D.
JOHN H. BUELL, M.D.
WILLIAM L. FOSTER, M.D.
C. E. LEMEN, M.D.
GORDON H. SCOTT, Ph.D.
JOHN M. SHELDON, M.D.
R. WALLACE TEED, M.D.
KENNETH W. TOOTHAKER, M.D.

ANNUAL REPORT OF PREVENTIVE MEDICINE COMMITTEE—1956-1957

As co-ordinator for its numerous advisory committees, the Preventive Medicine Committee has noted the initiation of important projects and continued development of those now in progress. The keen and devoted interest displayed has been highly gratifying since it promises significant accomplishment towards the solution of many difficult problems.

A brief review of what is being done and planned follows:

The *Geriatrics Committee* is concerned with establishing rules for licensure of nursing homes; with an insurance program for older people; with the setting up of community health forums; and with a driver-training program for older people. A Geriatrics Issue of the state JOURNAL was prepared and published in May, 1957.

The *Iodized Salt Committee* has been integrating the activities of several interested groups for more and

modern education of the public towards increased use of iodized table salt.

The *Maternal Health Committee* has apportioned its work among several cities of the state and has published a guide for Maternal Mortality Studies; established a maternal tissue register; initiated a study of rubella; considered the formulation of minimum standards for obstetrical care; proposed a Medical Liaison Committee advisory to county societies; started a program of lay education in the form of a brochure "Expectant Parent Conditioning"; sponsored and participated in an exhibit, "Care of Mothers and Children" by the Michigan Department of Health; and proposed the preparation of a series of single pages for the state JOURNAL giving informative material.

The *Rheumatic Fever Control Committee* plans to make a study of the incidence of rheumatic fever in Michigan; is continuing with the operation of the several Rheumatic Fever Centers in the state; is constantly revising informative material that is made available to every member of the Society; and, in co-operation with the Michigan Heart Association, has again awarded six postgraduate fellowships to local physicians who will study at St. Francis Sanitarium in Long Island, N. Y.

The *Tuberculosis Control Committee* has been concerned with the problems of proper utilization of excess beds in tuberculosis sanatoria; control of recalcitrant patients; and the role of private physicians in the finding, care and treatment of tuberculosis.

The *Mental Health Committee* is arranging a speaker's program on convulsive disorders; had sponsored a "Milestones for Marriage" project to be administered by the Woman's Auxiliary; and is concerned with the important problems of medical testimony, alcoholism, certification of psychologists and narcotic rehabilitation.

The *Child Welfare Committee* sponsored the March, 1957, issue of THE JOURNAL, MSMS; promoted education of law and medical students on the problem of adoption; considered the problem of prophylaxis for neonatal phtharmia; technique of examining children's eyes; visual acuity testing equipment; continued screening clinics for hearing defects; worked on school health problems and standardized forms; initiated action toward poison control centers and accident prevention; and proposed a joint meeting of committee members and representatives of each county society to promote child welfare activities locally.

This brief review describes only a few of the actions taken by several of the committees. For more complete information, the reader is referred to the individual reports of the advisory committees appearing in this handbook.

As in the past, our State Health Commissioner, Dr. A. E. Heustis, has participated actively and helpfully in our deliberations and we are grateful for his contributions.

Respectfully submitted,

W. S. REVENO, *Chairman*
I. A. LACORE, M.D.
B. E. BRUSH, M.D.
S. T. HARRIS, M.D.
R. M. HEAVENRICH, M.D.
A. E. HEUSTIS, M.D.
W. A. HYLAND, M.D.
O. J. JOHNSON, M.D.
F. A. JONES, JR., M.D.
A. H. PRICE, M.D.
R. L. RAPPORT, M.D.
J. M. SHELDON, M.D.
FRANK STILES, JR., M.D.
H. A. TOWSLEY, M.D.

ANNUAL REPORT OF MEDIATION COMMITTEE—1956-1957

During this time there have been no complaints submitted to the Mediation Committee, and no meetings have been held.

Respectfully submitted,

LUTHER R. LEADER, M.D., *Chairman*
D. R. BOYD, M.D.
A. E. GAMON, M.D.
E. B. JOHNSON, M.D.
W. Z. RUNDLES, SR., M.D.
R. W. TEED, M.D.
CHARLES TENHOUTEN, M.D.

ANNUAL REPORT OF COMMITTEE ON STUDY OF PREVENTION OF HIGHWAY ACCIDENTS—1956-1957

One meeting of the Committee on Study of Prevention of Highway Accidents was held in December. Gordon Sheeche, Director of the Highway Traffic Safety Center of Michigan State University, gave a report on the work of the Center. The resolution which had been referred to the Committee by the 1956 House of Delegates relating to ambulances disregarding traffic regulations was considered and approved. The Committee stated that in its opinion no medical emergency could exist that would be more important than public safety, and that ambulance drivers should at all times comply with the letter of the motor vehicle laws and not hurry at the expense of safety. It was moved that appropriate publicity be given to this action.

The Committee, recognizing the value of seat belts, and feeling that all students learning to drive should be impressed with their value and use, moved

"That the Michigan State Medical Society suggest to the Department of Public Instruction that it consider recommending to all public school systems giving driver training that seat belts be installed in all driver training vehicles."

The Committee moved that members of the Committee prepare material on traffic first aid "don'ts" to be submitted to the MSMS Public Relations Counsel for possible release to state newspapers. It also was moved that the Committee suggest to the Postgraduate Medical Education Committee that it seriously consider a continuation of the excellent automobile trauma program used this year in some of the extra-mural postgraduate centers. Plans were considered as to topics and authors for the requested Traffic Safety Number of the MSMS JOURNAL for September, 1957.

The AMA Committee on Medical Aspects of Automobile Injuries and Deaths is currently preparing a manual entitled "Medical Guide for the Operation of Motor Vehicles." When completed this will be a valuable source of information which can be tailored to state needs, and for this reason some work which might have been considered by the MSMS Committee this year has been postponed until next year when it is hoped this manual will be ready.

In the name of the Committee, the Chairman made the following contacts during the year:

1. Spoke at Portland, Oregon, in November at a meeting of the Oregon Lifesavers, on Michigan's Student Driver Training law. This meeting was arranged by the Oregon State Medical Society. This winter the Oregon legislature passed a student driver training law which in general is patterned after the Michigan law;

2. Had a one-day conference with a representative of General Motors on matters of mutual interest to the medical profession and the motor car industry;

3. Represented MSMS in Washington in March at hearings of the House Subcommittee on Traffic Safety, giving testimony in relation to three areas:

- (a) Reasons for the resolution calling for Federal supervision of safety standards of motor car design and construction, which resolution was introduced by the Michigan Delegation at the November, 1955, session of the AMA House of Delegates and which was unanimously adopted by that body;
- (b) Michigan's student driver training program as a pattern for other states;
- (c) The problem of the sleepy driver.

The above testimony was offered as supplementary to that which will be given later this year by the AMA.

4. Appeared in Lansing before a Senate committee in support of SB 1423, a bill requiring the answering of certain questions regarding health on driver applications and the furnishing of physicians' certifications where questions of driver fitness arise. This bill, which was recommended by the MSMS Traffic Committee last year, was not reported out of the Senate committee this year;

5. Took part in a panel discussion on Traffic Safety at the meeting of the AMA Auxiliary in June, emphasizing the opportunities for state auxiliaries to initiate student driver training legislation similar to Michigan's;

6. Spoke on the Medical Aspects of Driver Safety before the annual meeting of Michigan Chiefs of Police in June.

Respectfully submitted,

JOHN R. RODGER, M.D., *Chairman*
G. H. AGATE, M.D.
H. E. DEPREY, M.D.
J. M. DORSEY, M.D.
H. F. FALLS, M.D.
A. Z. HOWARD, M.D.
H. T. JOHNSON, M.D.
R. F. POWERS, M.D.
C. L. STRAITH, M.D.
H. J. MEIER, M.D.

ANNUAL REPORT OF ADVISORY COMMITTEE TO WOMAN'S AUXILIARY—1956-1957

This Committee did not have an official meeting during the year, although matters relating to the activities of the Auxiliary were discussed between the President of the Auxiliary and the Chairman and some members of the Committee.

The Committee has studied the National Science Fair idea with the Auxiliary's First Vice-President and reports much interest in support of this project.

The members of the Committee take this opportunity to commend the officers of the Auxiliary for the excellent way in which they have executed their duties this year.

Respectfully submitted,

JOHN E. HAUSER, M.D., *Chairman*
A. B. ALDRICH, M.D.
W. J. BUTLER, M.D.
W. L. SHERMAN, M.D.

ANNUAL REPORT OF ADVISORY COMMITTEE TO MICHIGAN STATE MEDICAL ASSISTANTS SOCIETY—1956-1957

There were no formal meetings of this Committee, the membership voting by mail on an insurance problem and on a method of approving advertising in the new Bulletin of the Michigan State Medical Assistants Society.

The MSMAS was represented in Milwaukee, Wisconsin, in October, 1956, at the first annual meeting of the American Association of Medical Assistants. Miss

Hallie Cummins of Caro, Michigan's delegate to the National Board of Directors, was elected Chairman of the Executive Committee. Many Michigan members are serving on and heading committees in the national organization. Ralph W. Shook, M.D., of the Advisory Committee was among the physicians attending. The Advisory Committee helped with the many problems concerning the adoption of the first constitution and by-laws. The second annual meeting will be held in San Francisco, October 4, 5, and 6, 1957.

Two Presidents' Conferences were held this year as training programs for officers and standing committee chairmen of component Medical Assistants Societies in Michigan. The fall conference was held November 4, 1956, in Saginaw with an attendance of sixty members. The theme was an organization workshop with presentation of job manuals for officers and standing committee chairmen. The spring conference was held in Muskegon on April 17, 1957, with thirteen counties represented. The theme was public speaking.

A revision of the voting procedure has been under consideration. A detailed method of voting by mail will be submitted to the MSMAS membership at the annual meeting in September.

The news organ, mimeographed in January, assumed a "new look" in May, when the "Bulletin" of the MSMAS was printed for the first time and sent to each member. This is an excellent publication and all concerned are to be congratulated. The Bulletin, which carries approved advertising, is to be issued quarterly and will include important conference and convention speeches and reports.

A standing committee on education was initiated this year to study, encourage and promote a well-rounded educational program for medical assistants throughout the state. Through the efforts of this MSMAS committee members are being encouraged to start evening school programs in all counties. Brochures from the one-year training program for medical assistants in Highland Park Junior College and from the two-year training program from Ferris Institute in Big Rapids have been distributed to high schools throughout the state. Many members have spoken to high school groups concerning the benefits of becoming trained medical assistants. The one-year scholarship to Highland Park for a medical assistant has been continued. A method of accrediting medical assistants for the knowledge and training they acquire is another committee activity.

The membership as of May 30, 1957, is over 900, and two new component societies in Branch and Eaton counties have been organized. Contacts have been made with twenty-two unorganized counties, and the medical assistants feel sure that within the next few years the coverage will be complete in Michigan. Thanks are due to county medical societies, Michigan Medical Service representatives, and drug detail men who have assisted greatly in the efforts to organize new county societies of medical assistants.

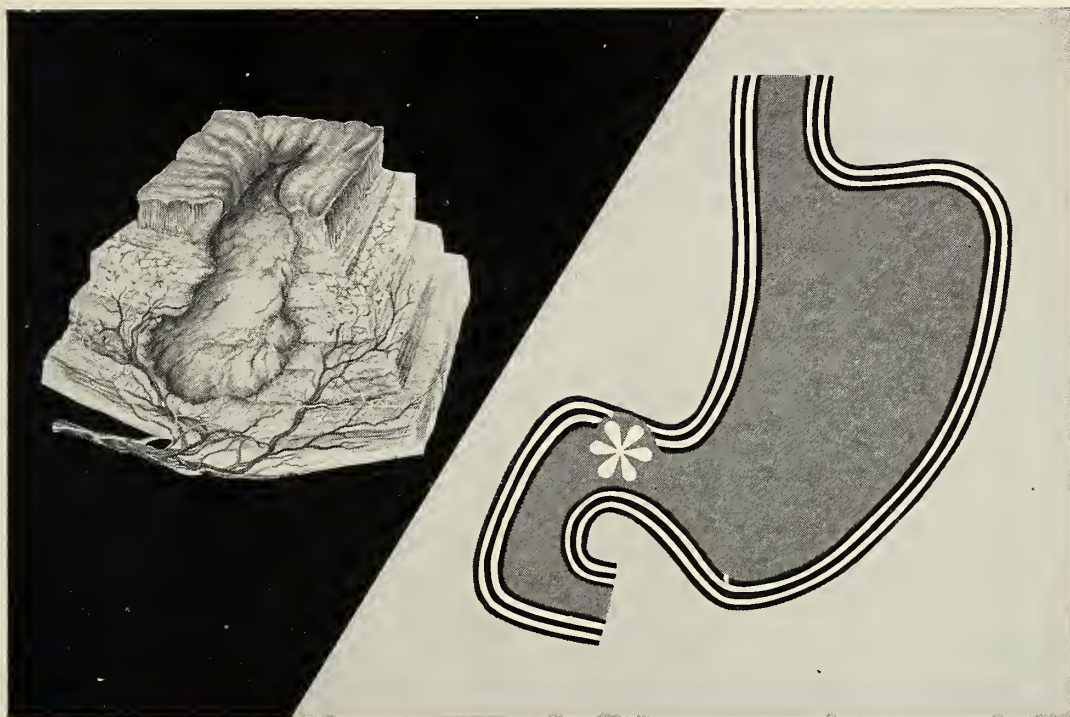
The Upper Peninsula Society has made great strides since its organization in June, 1956. Extensive plans have been made for the first convention in Houghton in June, 1957, and many district groups have formally organized.

The MSMAS was contacted by the Ontario Medical Association for suggestions and advice on the proposed Ontario Medical Secretaries Association. This meeting was held in Lansing.

We, as physicians, are pleased and proud of the calibre, aims, and accomplishments of the members of the MSMAS.

Respectfully submitted,

DAVID KAHN, M.D., *Chairman*
RALPH W. SHOOK, M.D.
E. R. SHERRIN, M.D.
T. J. TRAPASSO, M.D.
OTTO VANDERVELDE, M.D.
J. E. WEBBER, M.D.



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SEARLE

Michigan's Department of Health

Albert E. Heustis, M.D., Commissioner

PUBLIC HEALTH LEGISLATION

A bill which will be of interest to all physicians was passed by this session of the Legislature. It provides for protection of the confidential nature of information shared with the State Health Commissioner, in the conduct of studies which the State Health Commissioner designates in advance to be medical research.

A bill of special concern to local health departments empowers them to employ personnel in addition to the presently authorized physicians and nurses. Up to this time, local health departments were not authorized to hire sanitarians though they have long been accepted as indispensable members of the basic staff of an effective health department. Passage of the bill makes possible the legal employment of any qualified persons needed to perform the tasks of providing community health services.

Two other bills passed at this session, of particular interest in connection with tuberculosis control will permit county and joint county tuberculosis sanatoria to hospitalize patients for treatment of diseases other than tuberculosis.

Another change in tuberculosis statutes provides for a specialized care facility at Northern Michigan Tuberculosis Sanatorium or at any approved hospital maintained for the care and treatment of patients with tuberculosis, in which committed or so-called recalcitrant patients would be hospitalized. This legislation provides only the legal basis for the special care facility. No funds have been appropriated for construction, equipping or staffing such a unit.

A proposal which did not pass the Legislature was a bill regarding air pollution control. The objective of this bill was to grant specific authority to the State Health Commissioner to control air pollution sources. The bill passed the House but was not reported out of committee in the Senate.

Another bill providing for reorganization of state health agencies failed enactment.

INTER-PERSONAL RELATIONS

Physicians who are board of education members or those whose advice may be asked on setting up family living courses in their schools will find helpful an article in the January issue of *Michigan's Health*, a monthly publication of the Michigan Department of Health. Title of the article is "Inter-Personal Relations" and it is by Henry Eddy, Principal of Northeastern High School, Detroit. Mr. Eddy describes the steps taken in building community understanding and support of a highly successful course at the ninth grade level in that school. The course begins with discussion of family relations, considers boy and girl relations, maturity and reproduction, and closes with a summary of attitudes and values in personal and community living.

REPORTING RESULTS OF SEROLOGIC REACTION FOR SYPHILIS

A new terminology for reporting the results of serologic tests for syphilis has been recommended by the National Serology Advisory Council to the Surgeon General of the United States Public Health Service. In accordance with this recommendation, and with the approval of the Venereal Disease Control Committee of the Michigan State Medical Society, the Division of Laboratories of the Michigan Department of Health will now report the laboratory results of the serologic tests for syphilis as Nonreactive, Weakly Reactive, and Reactive. These terms for listing results are used as follows:

<i>New Terms</i>	<i>Terms Previously Used</i>
Nonreactive	Negative
Weakly Reactive	Doubtful
Reactive	Positive

There will be no change in the quantitative testing of bloods found to be Reactive (Positive) on routine test.

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SUMMER COURSES FOR HEARING AND VISION TECHNICIANS

A preliminary hearing technicians training program was held at Eastern Michigan College from June 23 to 28. Purpose was the preparation of technicians to work in community hearing conservation programs.

Classes for training vision technicians are scheduled at two centers during the summer, at Central Michigan College, July 8 through 12, and at Eastern Michigan College, July 15 through 19. Technicians trained are employed by communities throughout the state to work in vision programs in schools.

Tumors of the kidney are almost invariably malignant. Diagnosis must be early if cure is to be effected. Nephrectomy is the only procedure which will eradicate the growth. Hematuria is the most important symptom. Pain in the flank is the second most important symptom.

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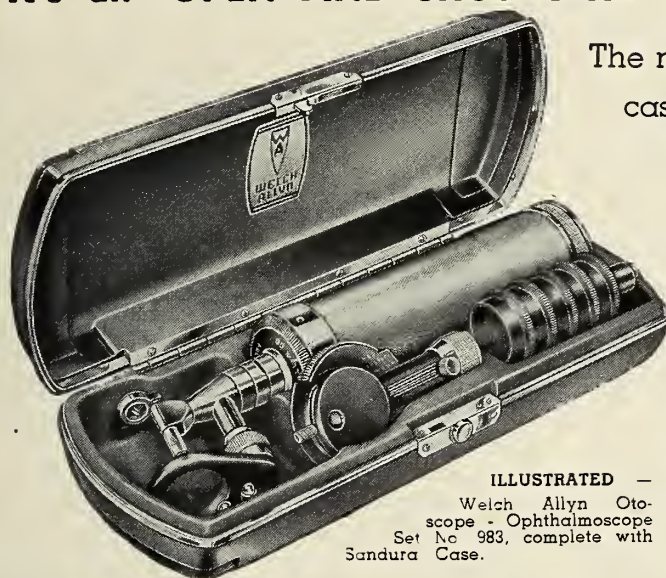
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In Memoriam

Jerome W. Ankley, M.D., sixty, of Grosse Pointe Park, was a Detroit physician for thirty-five years. He was a member of St. Ambrose Roman Catholic Church, and a retired member of the Michigan State Medical Society. He died April 27, 1957.

* * *

Claude W. Behn, M.D., sixty-two, Detroit dermatologist for thirty years, died May 12, 1957, after a long illness.

* * *

Karl B. Brucker, M.D., seventy-two, Lansing proctologist, was born at South Lyons, July 27, 1884. He was a graduate of the University of Michigan. Devoting much time to civic affairs, he was a charter member and past president of the Lions Club and helped with its work with blind children. His interest in amateur theatricals was directed toward the Civic Player organization, with which he was associated for a quarter of a century. His acting talents earned him many lead and top supporting roles in its productions. He was a life member of Capital Lodge No. 66 A. & F. M.; B.P.O.E. No. 196 and the Central Methodist Church. Doctor Brucker was a retired member of the Michigan State Medical Society. He died May 20, 1957, of a heart attack.

* * *

Murray M. DeWar, M.D., sixty, Grand Rapids ophthalmologist, was a 1919 graduate of Wayne University and took postgraduate work at hospitals in New York, Vienna and London. He died March 30, 1957.

* * *

Joseph M. Foley, M.D., fifty-eight, Detroit radiologist, was born in Chicago but had lived and practiced in Detroit since 1944. A graduate of the medical school at St. Louis University in 1926, Doctor Foley was a member of the American Roentgen Society and the Huron River Hunting and Fishing Club. He died April 29, 1957.

* * *

Mr. Homer C. Fritsch, Executive Vice President of Parke-Davis Company, died suddenly April 8, 1957, in Montreal, where he had gone on company business.

His loss will be deeply felt, for he was a man of diverse talent and warm, friendly personality. Few persons in the history of Parke-Davis have left their imprint for good on as many people as did Mr. Fritsch. During more than forty years, he served his company, community, and nation well.

The medical profession will remember Mr. Fritsch for his support of various medical programs and projects. Perhaps he will be longest remembered for his aid in bringing about the fulfillment of the Beaumont Memorial dream.

* * *

N. Arthur Gleason, M.D., fifty-nine, a Flint dermatologist for twenty-eight years, was a graduate of the

Wayne University College of Medicine. Dr. Gleason served as deputy district governor of the Lions Club in 1944, and was a member of the Elks, Masonic Lodge, the Commandery and Knights Templar. He died April 4, 1957.

* * *

William H. Gordon, M.D., sixty-six, Detroit, long-time chairman of the MSMS Committee on National Defense, was a member of the staff at Harper Hospital. A native of Findlay, Ohio, Doctor Gordon was a 1916 graduate of the University of Michigan Medical School. He was a veteran of both World Wars. During World War I, he was awarded the Purple Heart and was taken a prisoner by the Germans. During World War II, he commanded the 94th General Hospital in England. He died May 5, 1957, of a heart attack.

* * *

John N. Kemp, M.D., eighty-six, prominent Saginaw physician, served almost forty-five years as Chief of Staff of the Saginaw County Infirmary Hospital before retiring from that position in 1947. He also served on the staffs of St. Mary and Saginaw General Hospitals. He helped organize the Saginaw Valley Medical College and was a demonstrator of anatomy and professor of minor surgery on its staff. Doctor Kemp was a life member of the Michigan State Medical Society, a member of the Saginaw School Board for six years, and of Masonic Lodge No. 155 and the Elf Khurafeh Shrine. Death occurred April 20, 1957.

* * *

William T. King, M.D., eighty-two, Houghton County, was born in Calumet, December 5, 1874, and graduated from the University of Michigan in 1901. Doctor King was a physician-surgeon for the Old Dominion Mining Company of Globe, Arizona, from 1903-04. Returning to the copper country, Doctor King was physician-surgeon for the Allouez-Ahmeek Mining Company and later for Calumet and Hecla, Inc., from 1904 until his retirement in 1953. He was a member of Calumet Lodge No. 271, F. & A. M.; Calumet Chapter No. 135; Royal Arch Masons; Montrose Commandery, No. 38; Knights Templar; Ahmed Temple, Shrine of Marquette, and the Calumet Lions Club. Doctor King was also a director of the Keweenaw Savings Bank. He was an emeritus member of the Michigan State Medical Society. He died May 1, 1957.

* * *

John C. Koch, M.D., seventy-five, retired Detroit physician, died March 16, 1957.

* * *

Rudolph Leiser, M.D., fifty-five, Detroit psychiatrist and one-time clinical director of Wayne County General Hospital, was born at Breslaw, Germany, where he became a professor at the University of Breslaw Medical School. Doctor Leiser came to this country in 1933 and was in private practice at the time of his death April 22, 1957.

John Norup, M.D., fifty-nine, a practicing physician of Berkley for twenty-seven years, was on the staffs of Beaumont and Mt. Carmel Mercy Hospitals. A native of Denmark, Doctor Norup graduated from the University of Copenhagen and in 1925 came to this country, where he studied further at the University of Illinois. He died April 16, 1957.

* * *

A. J. O'Brien, M.D., seventy-four, prominent physician and surgeon of Wakefield for nearly fifty years, was born in Michigamme, Marquette County, August 18, 1882. He attended the University of Michigan and received a degree as a pharmacist, following which he worked in drug stores in Pontiac, Detroit, and Bessemer. In 1904, he returned to the University of Michigan and received his degree in medicine in 1908. A lifelong member of the Knights of Columbus, Dr. O'Brien was also an Elk and Rotarian. He was a life member of the Michigan State Medical Society. He died April 23, 1957.

* * *

Burton Parker, M.D., eighty, practiced in Detroit for sixty years following graduation from the Michigan College of Medicine. Doctor Parker had been on the staff of Grace Hospital for fifty-three years at the time of his retirement ten years ago. A member of the crew of the *U.S.S. Yosemite* in the Spanish American War, he served as a captain in the medical corps of the U. S. Army during World War I. He died March 27, 1957.

* * *

P. Wilfred Patterson, M.D., fifty-nine, Grand Rapids, received his medical degree from the University of Western Ontario and served his internship in London, England. He died April 8, 1957.

* * *

George L. Riley, M.D., sixty-seven, Grand Rapids, served on the senior staff of Butterworth Hospital nearly forty years, and was Grand Trunk Railroad surgeon for twenty years. A native of Broken Bow, Nebraska, and a graduate of St. Louis University School of Medicine in 1917, Doctor Riley served in France as a lieutenant in the Army Medical Corps in World War I. He died March 27, 1957.

* * *

Michael D. Ryan, M.D., eighty-nine, of Saginaw, was one of the last of the doughty "horse-and-buggy" doctors of early Michigan medicine. His active practice dates back to the lumberjack days when Saginaw was milltown mecca of the world. Born December 16, 1867 in Kingston, Ontario, and a graduate of Queens University in Kingston, he first came to Saginaw in 1891. In community service, Doctor Ryan had functioned as Saginaw City Health Officer, Police Commissioner and a member of the Board of Estimates. He was a member of the Knights of Columbus, and an emeritus member of the Michigan State Medical Society. He died April 18, 1957.

* * *

William H. Stokes, M.D., sixty-two, Lake City eye surgeon, was a native of the British East Indies before coming to the United States in 1913. Doctor Stokes attended schools in Germany before graduating from the

JULY, 1957

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University of Michigan in 1922. In 1925, he became the ophthalmologist for the Dallas Medical and Surgical Clinic in Dallas, Texas. Doctor Stokes was a professor at the University of Nebraska Medical College until 1943 when he was forced by illness to retire. Since retirement, he had conducted a limited practice in Lake City. He died suddenly of a heart attack, April 8, 1957.

* * *

O. H. Stuck, M.D., seventy-four, of Otsego, was born December 26, 1882, in Plainwell, Michigan. He graduated from the Chicago School of Medicine and Surgery and had practiced in Otsego during the past forty-five years. Doctor Stuck was a member of the DeWitt Clinton Consistory, Ambassador of the Saladin Shrine of Grand Rapids, Past Master of the Otsego Lodge No. 78 F. & A.M. and a member of B.P.O.E. No. 1711. He died suddenly May 2, 1957, of a heart attack.

* * *

Henry A. Tressel, sixty-nine, Wakefield physician, was born in Clay County, Indiana, July 19, 1887. He received his doctor of medicine degree at Northwestern University and began practice in Wakefield forty-four years ago. A member of the Odd Fellows, Masonic Lodges and Rotary, Doctor Tressel was honored in 1946 at a public testimonial dinner for his community service. He died April 23, 1957, of a heart attack.

* * *

John J. Watts, M.D., sixty-four, of Detroit, was a native of Tecumseh, Ontario, before coming to Detroit in 1911. He graduated from the Detroit College of Medicine in 1916 and served as an Army Captain in World War I. Doctor Watts was a member of Providence Hospital staff. He died May 3, 1957.

LENTE INSULIN

(Continued from Page 883)

evidence that the latter are harmful in daily use. However, allergies do occur and in these cases Lente would be of distinct advantage.

Summary

1. Lente is an intermediate insulin.
2. Variations seen in response to a single dose are noted.
3. These fall into two main types—with lowest blood levels at 4 P.M. and at noon.
4. Certain potential advantages are discussed, indicating that there is a place for Lente in our armamentarium.

Reference

1. Hallas-Møller, K: The Lente Insulins. Diabetes, 5:7-14 (Jan.-Feb.) 1956.

Correspondence

William J. Burns, LL.B.
Executive Director
Michigan State Medical Society
Lansing, Michigan

Dear Bill:

I have read with rapt interest the April issue of THE JOURNAL of the Michigan State Medical Society and believe it has reached an all-time high for professional journals in presenting the problem of cancer control.

Congratulations to all concerned, and may your continued efforts meet with the success which they so richly deserve.

With warmest personal regards, I am.

Sincerely yours,

W. KENNETH CLARK, M.D.

Acting Medical and Scientific Director
American Cancer Society, Inc.

New York, N. Y.
May 28, 1957

* * *

Dear Doctor Clark:

To say the least, your May 27 words are highly appreciated—they just stimulate us to greater effort in behalf of a better JOURNAL of the Michigan State Medical Society.

May I have your permission to quote your letter in JMSMS—the Correspondence section?

Respectfully yours,

WILLIAM J. BURNS
Business Manager

Lansing, Michigan
June 7, 1957

Dear Doctor Haughey:

During the past ten years or so, an annual "Summer Round-up" for pre-school children has been conducted under the supervision of the St. Clair County Health Department with the co-operation of the various local PTA's and members of the Medical Society.

A committee of the Medical Society and the Health Director have had this matter under study during the past year and upon their advice and with the acceptance of the Port Huron and St. Clair Councils of PTA, the program has been changed in order to insure a better health program for the child by placing the matter back in the hands of the child's physician where we feel that it belongs.

This year, parents are being directed by letters released from the various schools to take their children to their physicians and dentists for health examinations. Forms are distributed to be completed by the examiners. Unfortunately, some parents were prematurely advised to accomplish this during April and May. We are informed that this early deadline is not necessary and examination any time before the beginning of the new school year in September will suffice.

If you normally include children in your practice, we urge you to co-operate fully in the program to insure its success. The PTA and school authorities plan to make a survey in the fall to determine the amount of participation by parents. By our continuing interest, the program will be improved from year to year. Very likely some form of mass examinations for the relatively few indigent and irresponsible families may be needed; if so, any need for your participation will be announced through the Medical Society.

Port Huron, Michigan
May 20, 1957

CHARLES N. HOYT, M.D.
President, St. Clair Medical Society



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MICHIGAN AUTHORS

John W. Smillie, M.D., Ann Arbor, is the author of an article entitled "External Ankyloblepharon with Pseudo-Exotropia" published in the *American Journal of Ophthalmology*, March, 1957.

Carey P. McCord, M.D., Ann Arbor, is the author of an article entitled "Seven Thousand New Mouths to be Fed Every Morning," published in *Industrial Medicine and Surgery*, May, 1957.

John G. Batsakis, M.D., Ann Arbor, is the author of an article entitled "Brain Damage Following Urokon Injection in the Brachial Artery: Report of a Case," published in *University of Michigan Medical Bulletin*, February, 1957.

Gail H. Williams, M.D., and **Edward J. Klop, Jr., M.D.**, Ann Arbor, are the authors of an article entitled "Intermesenteric Arterial Communications" published in the *University of Michigan Medical Bulletin*, February, 1957.

Floyd J. Lemmen, M.D., Pittsburgh, **Arthur L. Drew, M.D.**, Indianapolis, **Janice G. Glimn**, and **James E. Higgins**, Ann Arbor, are the authors of an article entitled, "Study of Cerebrospinal Fluid Proteins with Paper Electrophoresis II. Techniques for Quantitation of Serum and Cerebrospinal Fluid," published in the *University of Michigan Medical Bulletin*, February, 1957.

Robert C. Hendrix, M.D., Ann Arbor, is the author of an article entitled "Experience in Forensic Pathology in a General University Hospital and Department of Pathology," published in the *University of Michigan Medical Bulletin*, February, 1957.

C. Howard Ross, M.D., Ann Arbor, is the author of an article entitled "Philosophy's Dance About the Fee," published in *The New Physician*, May, 1957.

Sidney Adelson, M.D., and **David C. Laderach, M.D.**, Detroit, are the authors of an article entitled "Reserpine in the Elderly Hypertensive Patient," published in *Harper Hospital Bulletin*, March-April, 1957.

John R. Simpson, M.D., Detroit, is the author of an article entitled "Steroid Diabetes—Case Report," published in *Harper Hospital Bulletin*, March-April, 1957.

John C. Mayne, M.D., Detroit, is the author of an article entitled, "Reconstructive Surgery on the Fallopian Tubes," published in *Harper Hospital Bulletin*, March-April, 1957.

H. Saul Sugar, M.D., Detroit, **Ahmed Riazi, M.D.**, Shiraz, Iran, and **Rome Schaffner, M.D.**, Detroit, are the authors of an article entitled "The Bulbar Conjunctival Lymphatics and Their Clinical Significance," presented at the Sixty-first Session of the American Academy of Ophthalmology and Otolaryngology, Octo-

ber, 1956, Chicago, and published in *Transactions, American Academy of Ophthalmology and Otolaryngology*, March-April, 1957.

Lynn A. Ferguson, M.D., Grand Rapids, is the author of an article entitled "Medical and Surgical Aspects of Chronic Ulcerative Colitis: An Appraisal," read at the Mid-Atlantic Division Regional Meeting of the United States and Canadian Sections, International College of Surgeons, White Sulphur Springs, Virginia, February, 1957, and published in the *Journal of the International College of Surgeons*, April, 1957.

Vergil N. Slee, M.D., Ann Arbor, is the author of an article entitled "Medical Practice and Statistics" presented at the Washington University Medical Alumni Association Annual Clinics Session, St. Louis, Missouri, June, 1956, and published in *Arizona Medicine*, April, 1957.

Frank W. Hartman, M.D., and **Gerald A. Logrippo, M.D.**, Detroit, are the authors of an article entitled "Beta-Propiolactone in Sterilization of Vaccines, Tissue Grafts, and Plasma," read before the Section on Pathology and Physiology at the 105th Annual Meeting of the American Medical Association, Chicago, June, 1956, and published in the *Journal of the American Medical Association*, May, 18, 1957.

Charles G. Johnston, M.D., Detroit, is the author of an article entitled "Of One Medicine, Nine Surgeries," the presidential address read at the 64th Annual Meeting of the Western Surgical Association, Cincinnati, November, 1956, and published in *AMA Archives of Surgery*, May, 1957.

H. Mason Morfit, M.D., Denver, **Calvin T. Klopp, M.D.**, Washington, D. C., and **Adrian J. Neerken, M.D.**, Kalamazoo, Michigan, are the authors of an article entitled "Bridging of Laryngopharyngeal and Upper Cervical Esophageal Defects," read at the 64th Annual Meeting of the Western Surgical Association, Cincinnati, November, 1956, and published in *AMA Archives of Surgery*, May, 1957.

Brock E. Brush, M.D., **Melvin A. Block, M.D.**, **Thomas Geoghegan, M.D.**, **Dwight C. Ensign, M.D.**, and **John W. Sigler, M.D.**, Detroit, are the authors of an article entitled "The Steroid-Induced Peptic Ulcer," read at the 64th Annual Meeting of the Western Surgical Association, Cincinnati, November, 1956, and published in *AMA Archives of Surgery*, May, 1957.

Nicholas S. Gimbel, M.D., **Donald I. Kapetansky, M.D.**, **Frederick Weissman, M.D.**, and **Hermann K. B. Pinkus, M.D.**, Detroit, are the authors of an article entitled "A Study of Epithelization in Blistered Burns,"

(Continued on Page 922)



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*REFERENCE: J.A.M.A. 163: 359, 1957 (February 2)

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(Continued from Page 920)

read at the 64th Annual Meeting of the Western Surgical Association, Cincinnati, November, 1956, and published in *AMA Archives of Surgery*, May, 1957.

Harry A. Towsley, M.D., Ann Arbor, is the author of an article entitled "University of Michigan Plan for Postgraduate Medical Education: An Example of the Potentialities of Regional Hospital-Medical School Affiliation," published in the *Journal of the American Medical Association*, May 25, 1957. This paper was read before the 53rd Annual Congress on Medical Education and licensure, Chicago, February 11, 1957.

* * *

M. K. Newman, M.D., Detroit, presented a talk entitled "Clinical Applications of Electromyography" to the Eastern Michigan Section of the American Physical Therapy Association at Sinai Hospital, April 16, 1957. On May 15, 1957, before the Livingston County Chapter of the Muscular Dystrophy Associations of America, Dr. Newman presented a paper entitled "Development of a Muscular Dystrophy Clinic and Its Value in Management of Both Childhood and Adult Types of Myogenic Disease."

* * *

John M. Sheldon, M.D., Ann Arbor, was a speaker at the Eighty-ninth Annual Session of the Nebraska State Medical Association, held at Omaha, May 13-16, 1957. The title of his talk was "Office Management of

Allergy Problems" and covered means and methods by which the general practitioner can diagnose and treat allergy problems in his own office.

* * *

Dr. Alexander W. Blain, Sr., president of the Detroit Museum of Science Society, has established a Museum of Natural History and Health on the second floor of the old City Hall Building, Woodward Avenue, Detroit, Michigan.

The Detroit Museum has exhibits of birds and bird eggs, American and African animals, fish, astronomy, horticulture, and Indian display and a prehistoric animal exhibit including a skeleton of a mastodon unearthed in Michigan.

Detroit, up to this time, has been unique in being the only city in the world of any size without a Museum of Science.

Dr. Robert Hatt, Director of the Cranbrook Institute of Science, has recently returned from a trip to Iran and Indonesia where he established a Museum of Science for their respective governments.

* * *

Additional Polio Innoculations—Children who received the recommended series of three Salk vaccine shots a year or more ago should now receive a fourth "booster" inoculation, Thomas Francis, Jr., M.D., of the University of Michigan recommends.

Chairman of the Department of Epidemiology in the U-M School of Public Health, Dr. Francis evaluated the



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354 field trials of the Salk vaccine. He advises the booster as a safety measure "until we have a much clearer picture of the lasting potency of the vaccine." He suggests children and teen-agers should get the booster to help "make sure the vaccine has an opportunity to exert its full effect."

The U-M expert does not recommend that the Salk booster shots become an annual affair, however. Citing the fact that this is only the third year the vaccine has been used on a national basis, Dr. Francis says boosters will probably be needed less frequently as improvements in the potency and consistency of the vaccine are made.

Should a shortage of vaccine occur, Dr. Francis believes the under-20 age group should receive first priority in getting their initial series of three shots. Children who had the series a year or more ago should receive second priority for vaccine, he maintains.

Dr. Francis discounts giving the vaccine credit for the low incidence of polio in 1956, which was the lowest polio year since 1947, but adds, "There is clear evidence that the severity of polio is less in vaccinated cases."

He states that known fluctuations indicate the decline in polio last year may be the result of natural variation in the incidence of the disease. However, he does credit the vaccine for the sharp drop in the number of paralytic cases in the highly susceptible five- to nine-year-old age group.

* * *

Lampreys are being fattened in a huge fish bowl at the laboratories of the University of Michigan School of Medicine in the Kresge Medical Research Building, Detroit for research in diseases of the inner ear. A report from Merle Lawrence, M.D., Medical Acoustics, states:

"There are certain diseases of the inner ear, involving acoustic trauma, about which we know very little. In order to obtain the type of information we are seeking, we have to dissect the inner ear of a living creature. We then observe and make electrical response readings to gather data."

Dr. Lawrence and his colleagues are interested in the reactions of the inner ear's sensory organs to various stimuli and in the nature of environmental factors in the ear fluid. They are also interested in the effect of the lamprey's inner ear fluid on the behavior of inner ear cells.

The lamprey was chosen for this research because of the accessibility of his inner ear to the scientist.

The sensory cells of the lamprey's inner ear will be tested in a number of ways to find out what kind of toxic conditions in that part of the auditory structure affect hearing—noise, vibration, shock, or other factors.

* * *

Award of fifty-five unclassified life science research contracts in the fields of medicine, biology, biophysics, radiation instrumentation and in special training was announced by the U. S. Atomic Energy Commission. The contracts were awarded to universities and private institutions as part of AEC's continuing policy of assisting and fostering research and development in fields related to atomic energy as specified in the Atomic Energy Act of 1954, and as amended in 1956.

Three of these awards were made to Michigan in-

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1. Pollock, B. E., and Pruitt, F. W.: *Am. J. M. Sc.*, 226:172, 1953.

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stitutions: (1) to Wayne State University—An Evaluation of Radioactive Isotope Gamma Ray Source for Medical Teletherapy, the investigator being J. E. Lofstrom; (2) to the University of Michigan—Development of Information concerning (a) Human Mutation Rates, (b) The Accumulation of Deleterious Recessive Genes in Human Populations, and (c) The Manner of Action of Selective Factors on Both Contemporary and Primitive Human Populations, the investigator being J. V. Neel; and (3) to Michigan State University—I. The Absorption and Utilization of Radioactive Minerals Applied to the Leaves of Plants; II. The Absorption and Utilization of Ruthenium by Plants; III. The Leaching of Nutrients from Leaves of Plants, the investigator being H. B. Tukey.

* * *



New techniques of surgery for tuberculosis and lung cancer are shown in "Some Surgical Techniques in a Chest Hospital," a film just released by the Michigan Tuberculosis Association. It is designed for physicians and other medical personnel.

The color film may be obtained by writing to the Michigan Tuberculosis Association, 403 Seymour Avenue, Lansing 14, Michigan. It is available for use by medical societies, nurses training schools, and other professional groups in the medical sciences.

MICHIGAN TUBERCULOSIS ASSOCIATION

* * *

A two-month course in occupational medicine is offered to physicians by the New York University Postgraduate Medical School, September 16-November 8, 1957. Tuition is \$350.00. For further information, write the Office of the Associate Dean, New York University Postgraduate Medical School, 550 First Avenue, New York 16, N. Y.

* * *

Los Angeles will be the host city for the 1957 International Conference of Ultrasonics in Medicine on September 6-7. Additional details may be obtained from John H. Aldes, M.D., Secretary, 4833 Fountain Avenue, Los Angeles 29, California.

* * *

Frederick A. Coller, M.D., Ann Arbor, received two honors from Washington University at the commencement exercises, June 10-12. He received an honorary degree of Doctor of Science and the Doctor Evarts Graham Medal for 1957. Congratulations, Dr. Coller!

* * *

Following the showing of Upjohn's fourth and fifth Grand Rounds at the June AMA Convention in New York, all five of the filmed series will be available without charge for showing before any group in the medical profession, including students. Arrangements for showing can be made through the local Upjohn representative.

* * *

The American Urological Association offers an annual award of \$1,000 for essays on the result of some clinical or laboratory research in urology. Competition is limited

JMSMS

urologists who have been graduated not more than a years and to hospital interns and residents doing research work in urology.

Essays shall be submitted before December 1, 1957, William P. Didusch, Executive Secretary, 1120 North Charles Street, Baltimore, Maryland.

* * *

The Provident Life and Accident Insurance Company reports that its group accident and sickness insurance, available through the Michigan State Medical Society, had paid over 500 claims to doctor-members. The amount paid varied up to \$7,500 per claim. The largest claims to date have been paid for disabilities involving the heart and tuberculosis. Four accidental death claims have been paid with three deaths due to automobile accidents and one drowning. The Michigan representative, Mr. Richard McDermott, has been assigned on a full-time basis to assist MSMS members.

* * *

The Institute of Industrial Health of the University of Cincinnati announces that the third biennial course in instruction in occupational skin problems will be given during the week of October 28-November 1, 1957. Physicians interested in attending the course should write to Secretary, Institute of Industrial Health, Eden and Bethesda Avenues, Cincinnati 19, Ohio. Attendance will be limited.

* * *

Jerome W. Conn, M.D., Ann Arbor, has been awarded the Claude Bernard Medal from the University of Montreal's Institute of Experimental Medicine and Surgery. The honor is in recognition of work which led to the description two years ago of a new disease associated with high blood pressure, now called Conn syndrome.

* * *

A clever and informative Northern Michigan Medical Society Newsletter was first published in March. Secretary E. F. Crippen, M.D., is serving as Editor and plans the publication as a monthly service to members, featuring items of general interest to the medical profession.

* * *

The Proceedings of the Third National Cancer Conference, held last June in Detroit, have just been published. The 961-page illustrated volume is available at \$1.00 per copy from J. B. Lippincott Company, Philadelphia, Pennsylvania.

* * *

Britain's Health Service of no Value to Eden.—While Britain's National Health Service is in the throes of a crisis, Anthony Eden made a hurried 11,000-mile trip from New Zealand to the Lahey Clinic in Boston for emergency medical care.

Apparently, the former British prime minister wanted part of his country's medicine, which was socialized a decade ago.

It's the second time he has sought medical attention at the Lahey Clinic. He underwent surgery there in 1953 to correct a bile duct obstruction. Mr. Eden is now suffering from a liver ailment.

Just a few weeks before his arrival here, Britain's

LY, 1957

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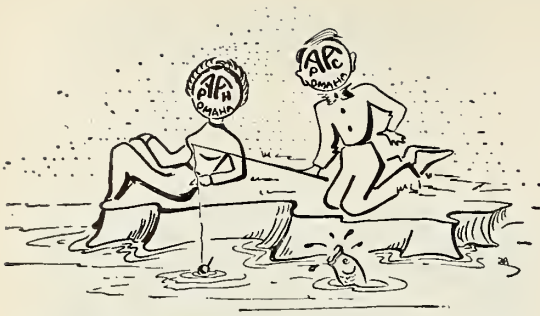
The CAMBRIDGE "SIMPLI-SCRIBE" Model is a direct writing, portable electrocardiograph. When used in combination with the Audio-Visual Recorder, the electrocardiogram from the "Simpli-Scribe" may be viewed upon the cathode ray screen of the Recorder while listening to the heart sounds, or the electrocardiogram may be superimposed upon the heart sound trace for timing complex cases.

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40,000 socialized medicine doctors threatened to strike unless the government quits stalling on their demand for a 24 per cent increase in pay. The matter now rests with a royal commission which is to make a study report in October.

"Why did the once prominent prime minister choose an American hospital instead of one in his homeland?" Mrs. Stephen C. Bacheller asked in one of her recent letters to me. She is area legislative chairman of the Woman's Auxiliary to the AMA in Enderlin, North Dakota.

"Of course," she then added, "Mr. Eden isn't the first foreign notable to take advantage of the excellent medical care available in the United States."

The truth of the matter is that British doctors have been on a demoralizing treadmill for a long time, with the result that they have been progressively losing their freedom and status as a learned profession.

Good medicine simply can't flourish in such a climate. Possibly Mr. Eden is well aware of this; hence his hurried air trip to the Lahey Clinic.—*AMA Secretary's Letter*, April 17, 1957.

* * *

The Seventh Congress of the Pan-Pacific Surgical Association will be held in Honolulu, Hawaii, November 14-22, 1957. Information and brochures may be obtained by writing F. J. Pinkerton, M.D., Director General of the Pan-Pacific Surgical Association, Young Building, Honolulu, Hawaii.

* * *

The Sixth Conference on Physicians and School has been scheduled by the AMA for October 2-3 and November 2.

* * *

The Genesee County Medical Society announces it will present its Thirteenth Annual Cancer Day Program on Wednesday, April 9, 1958.

* * *

A postgraduate course in pediatric allergy will be presented in New York in weekly one-day sessions on Wednesday between the dates of November 6, 1957 and May 28, 1958. The fee for the thirty sessions is \$300.00 and applicants must be certified in pediatrics or have the requirements for certification. Apply to the Office of the Dean, New York Medical College, 550 Avenue at 106 Street, New York 29, N. Y.

* * *

A one-week course in radiation for industrial physicians and lawyers will be offered by the Institute of Industrial Health and the College of Law of the University of Cincinnati during the week of September 16-22. The course is the first of its kind and enrollment will be limited. Tuition is \$100.00 per person. For further information and application, write Secretary, Institute of Industrial Health, College of Medicine, University of Cincinnati, Cincinnati 19, Ohio.

* * *

The University of Illinois College of Medicine announces its Annual Assembly in Otolaryngology for September 30-October 6, 1957. Interested physicians should write direct to the Department of Otolaryngology, 100 W. Polk Street, Chicago 12, Illinois.

The Ninth Postgraduate Assembly in Endocrinology and Metabolism is scheduled in Augusta, Georgia, October 21-25, 1957. For further information on the program and registration, write to Robert B. Greenblatt, Department of Endocrinology, Medical College of Georgia, Augusta, Ga. Registration is limited to 100; tuition fee is \$100.00.

* * *

Thomas Francis, Jr., M.D., and Rueben L. Kahn, M.D., of Ann Arbor, have been named as Charter Fellows in the newly established American Academy of Microbiologists.

* * *

Dr. Penberthy honored—A \$50,000 gift to the Surgery Department of Wayne State University College of Medicine was announced recently as a major bequest from the estate of William A. Spitzley, M.D., prominent Detroit physician. According to the will, the money is in honor of Grover C. Penberthy, M.D., Clinical Professor of Medicine at Wayne since 1913. The bequest was that the money be used for research as determined by the Chairman of the Department of Surgery, Charles Johnston, M.D.

* * *

James M. Robb, M.D., Detroit, received an alumni award for significant achievement in the field of medicine at the 89th Annual Reunion of Wayne State University alumni.

* * *

The World Congress of Gastroenterology and the 15th Annual Meeting of the American Gastroenterological Association will be held in Washington, D. C., at the Sheraton-Park Hotel May 25-31 inclusive, 1958. The announcement was made by H. M. Pollard, M.D., Ann Arbor, Secretary-General of the Congress.

* * *

The Peruvian Medical Association announces it is organizing the first regional medical conference of central Peru to take place in Lima from August 11 to August 17, 1957. The Peruvian government has declared August as the "Month of the Martyr of Peruvian Medicine, Daniel A. Carrion."

* * *

If by magic we could eliminate today all new infections, we already have a stockpile of about 50,000,000 people in this country harboring live, virulent tubercle bacilli in their bodies. These individuals will produce a very substantial number of active cases of tuberculous disease year after year for decades to come unless some means are found to prevent such breakdowns and to destroy the tubercle bacilli now in their bodies. JAMES E. PERKINS, M.D., Managing Director, National Tuberculosis Association, J. Lancet, April, 1956.

* * *

Because of the tragic losses of educational records and official credentials of physicians resulting from wars and natural disasters in the past, the 10th General Assembly of WMA adopted a recommendation of its Council approving establishment of a Central Repository for Medical Records.

This action followed an extended study and consultation with other international organizations, none of

ly, 1957

Important Announcement of Arteriosclerosis Treatment

GEROT PHARMACEUTIKA, owners of United States Letters Patent #2-776-973 issued January 1957 to Gerhard Gergely of Vienna, Austria, have licensed MEYER AND COMPANY of Detroit, Michigan, to synthesize and market 3, 7-dimethyl-xanthine double salt in the United States of America.

3, 7-dimethyl-xanthine double salt with oleic acid and magnesium, a stable compound marketed in Austria since 1950 under the name "Perskleran" and used in the treatment of ARTERIOSCLEROSIS is being marketed by MEYER AND COMPANY under the trade name of "Athemol."

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which proposed to develop such a project themselves. All agreed it was urgently desirable and pledged their support and cooperation to WMA in developing the plan.

The national medical association in each country is to act as the "receiving agent" for the records of the doctors in that country, to verify such records, and to forward them to the WMA Secretariat for deposit.

* * *



FRED DROLETT, M.D.

Fred Drolett, M.D., a Lansing physician for fifty years who isn't thinking of retirement, was singled out for community recognition by members of the Elks Lodge at a testimonial dinner on May 11.

Dr. Drolett accepted an award for his long years of service to residents of the area.

The public dinner was attended by more than 200 devoted friends

and civic leaders. Toastmaster of the affair was O. B. McGillicuddy, M.D., MSMS, Councilor from Lansing. One of the featured speakers for the evening was L. Fernald Foster, M.D., MSMS, Secretary, who cited Dr. Drolett as a "proud example" of "a great physician who has endeared himself to his colleagues, friends and patients."

Assisting in the arrangements was Lawrence A. Drolett, M.D., who, like his father, is an Elk member. Rounding out the proud trio of Drolett doctors at the celebration was another son, Donald, a Lansing obstetrician.

* * *

The International Society of Internal Medicine will hold its Fifth Congress at the Sheraton Hotel, Philadelphia, April 24-26, 1958. For program and complete information, write T. Grier Miller, M.D., President of the Congress, 4200 Pine Street, Philadelphia.

* * *

Norvin C. Kiefer, M.D., has been chosen President-elect of the National Health Council and will assume the presidency in March, 1958. Dr. Kiefer, now in New York City, is an alumnus of the University of Michigan Medical School.

* * *

The Michigan State Medical Assistants Society held its Spring President's Conference on April 14 in Muskegon. Thirteen component societies were represented with a total registration of thirty-seven members.

Keynote speaker was Mr. Judson Perkins, Director of Public Relations of the General Telephone Company. Mr. Perkins spoke on "Human Relations and Communications," using audio and visual aids to explain proper telephone procedures and voice qualities. Also on the program was Mrs. John VanHaver, Woman's Director of radio station WKBZ, who conducted a workshop on how to speak effectively before a group.

The business meeting was chaired by Miss Doris Jarrad, president, of Lansing. Attendance plans for the 1957 convention of the American Association of Medical Assistants were discussed.

Perry C. Robertson, M.D., who retired on April 30 as superintendent of the Ionia State Hospital, was honored on the eve of his retirement at a community dinner attended by more than 160 community leaders of that city.

The affair was staged to commemorate the ending of forty-five years of service with the state mental hospital program, thirty-one of them as head of the Ionia institution. Having recently purchased a home in Ionia, the Robertsons will continue to reside in their adopted community.

* * *

The Genesee County Medical Society has a new administrative pilot. Her name is Ethel McWethy. Mrs. McWethy assumed the Executive Secretary's shoes previously filled by Mrs. Sara Warren, who retired April 30 on the occasion of a testimonial dinner in her honor sponsored by GCMS.

With administrative experience gained from years of secretarial service at Veterans' Hospital, Dearborn, and the Office of Vocational Rehabilitation in Columbus, Mrs. McWethy has settled in her job with maximum efficiency. Since 1954, the new executive served as secretary to

the McLaren General Hospital Medical Staff. During those three years, the Flint doctors were able to observe her many capabilities. Thus, when Sara Warren retired after seventeen years' service, Mrs. McWethy was an obvious and qualified successor.

Looking forward to fruitful years of service to the medical profession, we say, welcome, Ethel.

MEDICAL TELEVISION SHOWS

Produced by Michigan Health Council

WJBK-TV, Detroit

- May 5—Subject: M.D. Placement—Film—"A Citizen Participates"
- May 12—Subject: "Hospital Careers"—Guests: Mrs. H. A. Powell, Mrs. Patricia Ann Allen, Albert Smitheram, and E. M. Knights, Jr., M.D., all of Detroit, and Mrs. Elaine Verska, R.N., Dearborn.
- May 19—Subject: Rheumatic Fever—Film—"The Valiant Heart"
- May 26—Subject: Traffic Safety—Film—"According to the Record"

WKAR-TV, East Lansing

- May 9—Subject: National Hospital Week—"Careers That Count"—Guests—Sarah Cali, George M. Fritch, and Doris Loutzenhiser, all of Lansing, and L. G. Parrish of St. Johns.
- May 23—Subject: "Atomic Radiation"—Guest: Donald Van Farowe, Lansing.



ETHEL MCWETHY

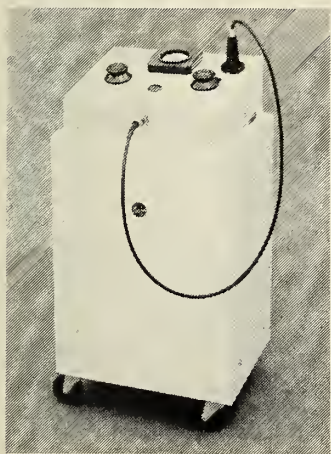


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Since 1900 heart disease has become more than ever a disease of middle and old age. Health Information Foundation says. Today about 70 per cent of all deaths from this disease takes place at ages sixty-five and over, and another 25 per cent between the ages of forty-five and sixty-four.

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Acknowledgments of all books received will be made in this column, and this will be deemed by us as full compensation to those sending them. A selection will be made for review, as expedient.

THE RIDDLE OF STUTTERING. By C. S. Bluemel, M.D., Fellow of the American College of Physicians; Fellow of the American Psychiatric Association; Fellow of the American Speech and Hearing Association. Printed in the United States of America. Danville, Illinois: The Interstate Publishing Company, 1957. Hard binding, \$3.50; paper binding \$1.50; Therapy Records, \$3.00.

The difference and distinction between stammering and stuttering is explained, mostly with usage in England and the United States. The theory of causation and control, and the methods of correction are given clearly and carefully. This is the best exposition we have seen of a very discouraging condition.

Stuttering is now recognized as a phase of mental aberration, a defect of balance and nerve reaction. Relaxation, deliberation, and soft speech seem to be necessary in treatment, results and improvement.

DISEASES OF THE NOSE, THROAT AND EAR. By Howard Charles Ballenger, M.D., F.A.C.S., Professor Emeritus of the Department of Otolaryngology, Northwestern University Medical School, Chicago; Surgeon, Department of Otolaryngology, Evanston Hospital, Evanston, Illinois, and John Jacob Ballenger, B.S., M.S., M.D., Associate in the Department of Otolaryngology, Northwestern University Medical School, Chicago; Associate Surgeon, Department of Otolaryngology, Evanston Hospital, Evanston, Illinois. Tenth edition, thoroughly revised; with 550 illustrations and 11 plates. Philadelphia: Lea & Febiger, 1957. Price \$17.50.

The reviewer, in evaluating this book, referred to the second edition of "Ballenger" published in 1909 by William Lincoln Ballenger which he used extensively. The present authors, who are of the second and third generations, have followed the lead established so many years ago and have largely rewritten many sections.

Just as the other editions have been, this present book is printed in very clear, good, readable type and is very practical. We like it.

PROCEEDINGS OF THE THIRD NATIONAL CANCER CONFERENCE. Detroit, Michigan, June 4-6, 1956. Sponsored by American Cancer Society, Inc., and National Cancer Institute, U. S. Public Health Service. Philadelphia and Montreal: J. B. Lippincott Company, 1956. Price \$9.00.

This presentation of the papers and symposia of the Third National Cancer Conference is an excellent source of information for the latest concepts of cancer etiology, natural history, hormonal relationships and therapy.

The first portion of the conference deals with general information of cancer including a presentation of the virus etiology of cancer by Dr. Wendell M. Stanley, University of California. The remaining and major

portion of this volume deals with all aspects of most of the common types of cancer.

Discussion of the rationale and efficacy of modes of therapy assumes a prominent part in the presentation. In cancer of the breast and prostate, hormonal relationships and effects are thoroughly discussed and the procedures of adrenalectomy and hypophysectomy are evaluated. The volume contains a well presented symposium on lymphomas and leukemias and a very interesting symposium on the chemotherapy of cancer.

Other symposia are presented on cancer of the lung, head and neck, female genital tract and the gastrointestinal tract.

The final symposium of the meeting is concerned with the end results of the treatment of cancer. These results are concise. Charts and diagrams are used to advantage but are not used excessively. In bringing the matter of cancer treatment up to date, the conference has done an effective job.

J.W.H.

SOYBEANS. For Health, Longevity and Economy. By Philip S. Chen, Ph.D., Professor of Chemistry, Atlantic Union College, with the assistance of Helen D. Chen, M.A., National Science Foundation Fellow, Cornell University. Illustrated. South Lancaster, Massachusetts: The Chemical Elements, 1957. Price \$3.00.

Dr. Chen gives a very complete discussion of soybeans, their culture, prevalence in various parts of the world, and use as a food for both humans and animals. He discusses a number of disease conditions which are

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benefited, mentioning especially the use of soybeans or of lecithin, an extract, which is of the vitamin variety, in holding down high blood pressure through its action in cholesterol. He gives a great many recipes for preparing the foods and lists many of these foods which are on the market in various places. Diabetes seems to be well controlled by soy products.

SURGERY. Principles and Practice. By J. Garriott Allen, M.D., Professor of Surgery, University of Chicago; Henry N. Harkins, M.D., Ph.D., Professor of Surgery, University of Washington School of Medicine; Carl A. Moyer, M.D., Bixby Professor of Surgery, Washington University School of Medicine, St. Louis; Jonathon E. Rhoads, M.D., D.Sc. (Med.), Professor of Surgery, University of Pennsylvania School of Medicine and Graduate School of Medicine, Philadelphia. Philadelphia and Montreal: J. B. Lippincott Company, 1957. Price \$16.00.

This is the first edition of a new surgical textbook. That it is an excellent work and fills some obvious voids in the current surgical texts becomes more evident as each chapter is reviewed. Perhaps the highest compli-

ment which could be afforded the authors would be that of achieving their objectives in writing the text.

These objectives, as stated by the authors and summarized by the publisher, are:

to answer the need for a textbook in surgery, giving stronger emphasis to basic material in physiology, anatomy, biochemistry and pathology;

to provide in a single volume a thoroughgoing introduction to surgery and the surgical specialties;

to encourage open-mindedness and stimulate research through a philosophy of surgery which stresses the fact that surgery is an art as well as a science, and that in acquiring that art one can never stop learning;

to emphasize contemporary surgery—especially in the fields of cardiac, vascular and military surgery;

to point up principles rather than concentrate on minute details;

to cover the physiologic bases of surgical practice in such a way that the text will serve the resident as a useful reference in matters of nonoperative care—fluid therapy, shock, blood transfusions, nutrition—while he learns his techniques by actual observation and experience;

to outline the pros and cons of surgical treatment as therapy for a number of important conditions.

Drs. Allen, Harkins, Moyer and Rhoads have successfully fulfilled their objectives. Approximately one-half of the book is written by these authors and the remainder by selected specialists in the different fields. These men have brought the basic sciences, surgical technique and the basic surgical principles into a proper relationship. This text is a welcome addition to the surgical literature.

R.M.

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THE CIBA COLLECTION OF MEDICAL ILLUSTRATIONS. Volume 3. A Compilation of Paintings on the Normal and Pathologic Anatomy of the Digestive System. Part III. Liver, Biliary Tract and Pancreas. Prepared by Frank H. Netter, M.D. Edited by Ernst Oppenheimer, M.D. 133 color plates. Summit, N. J.: The Ciba Company, 1957. Price \$13.00.

The Ciba Company, as a means of enlightened advertising, has for many years distributed to physicians and medical students, loose-leaf portfolios containing full color illustrations of normal and pathologic anatomy painted by Dr. Frank H. Netter. In 1953, the Ciba Company made arrangements with Dr. Netter to portray, in desirable detail, the major anatomy and pathology of all the systems comprising the human organism and to devote a separate volume of "The Ciba Collection of Medical Illustrations" to each system. This particular book, Part III of Volume 3, "Digestive System," is edited by Dr. Ernst Oppenheimer. A concise, descriptive text accompanies each of the full color plates that illustrate the essential anatomic, functional and pathologic features of the "large glands of the digestive apparatus." A new feature, the bibliography, contains over 300 references. The bibliography is by no means complete; it was added only as a convenience for those interested in checking or following up certain novel or complex points, which, owing to

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restricted space available for the text, had to be discussed in a very compact manner.

The Ciba Company, the editor, Dr. E. Oppenheimer, and the artist, Dr. F. Netter, are to be congratulated for producing a remarkably useful book. It is recommended for students, internists and surgeons alike.

J. W. HUBLY, M.D.

THE COMPLEAT PEDIATRICIAN. Practical, Diagnostic, Therapeutic, and Preventive Pediatrics. For the Use of General Practitioners, Pediatricians, Interns, and Medical Students. By Wilburt C. Davison, M.A., D.Sc., LL.D., M.D., James B. Duke, Professor of Pediatrics, Duke University School of Medicine, and Pediatrician, Duke Hospital, Formerly Acting Head of Department of Pediatrics, The Johns Hopkins University School of Medicine, Acting Pediatrician in Charge, The Johns Hopkins Hospital, and Member American Board of Pediatrics, Honorary Member American Academy of General Practice, Fellow American Academy of Pediatrics and American College of Physicians, Member American Pediatric Society, and Division of Medical Sciences, National Research Council, and Jeana Davison Levinthal, B.A., M.D., Instructor in Pediatrics, University of Michigan School of Medicine. Seventh Edition, Completely rewritten. Durham, N. C.; Printed by Seeman Printery for Duke University Press, 1957. Price \$4.50.

This seventh edition is really a new book. The rewriting has brought it up to date with fresh material on antibiotics steroids and electrolytes. The book could easily be a one-volume library for any pediatrician.

R.L.L.

A WOMAN DOCTOR LOOKS AT LOVE AND LIFE. By Marion Hilliard, M.D. Garden City, New York: Doubleday & Company, Inc., 1957. Price \$2.95.

This is a book written in a sympathetic and understanding manner by a woman who is also a doctor and who, over the years, has developed a very practical philosophy of living which she attempts to impart to her readers. She believes in inevitability, inevitability of living, of being human, of change, of marriage, and sometimes even of failure.

This book is her attempt to help women to know and understand what it means to be female, feeling that understanding will ultimately bring contentment. She discusses frankly and realistically the problems associated with a woman's first baby, how to tell children the facts of life, problems of adolescence, monotony in everyday living, fears which confront women, fatigue, and old age, plus many other helpful discussions.

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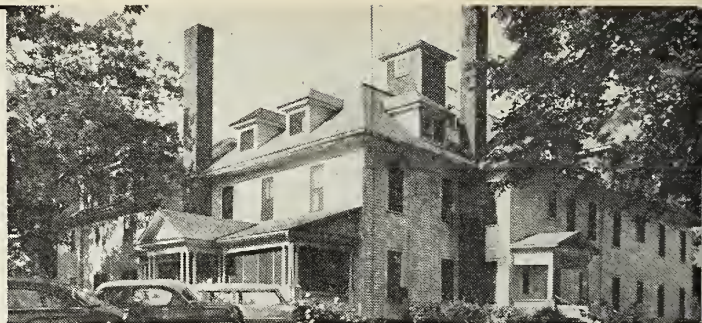
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A MONOGRAPH FOR THE PHYSICIAN: CANCER OF THE COLON AND RECTUM. Tenth of a Series on the Early Recognition of Cancer. By Frederick A. Collier, M.D., Professor of Surgery and Chairman, Department of Surgery, University of Michigan, Ann Arbor, Michigan. Assisted by Henry K. Ransom, M.D., and William J. Regan, Jr., M.D., American Cancer Society, Inc., 1957.

VEGETABLE OILS IN NUTRITION. With special reference to unsaturated fatty acids. By Dorothy M. Rathmann, Ph.D., Multiple Fellowship of Corn Products Refining Company, Mellon Institute, Pittsburgh 13, Pa. Published by the Corn Products Refining Company, 17 Battery Place, New York 4, N. Y.

THE FORD FOUNDATION ANNUAL REPORT, MEDICAL SERVICES FOR RURAL AREAS. The Tennessee Medical Foundation. By William A. Massie, Chairman, Health Committee, Council of the Southern Mountains, formerly Field Secretary, The Tennessee Medical Foundation. Published for The Commonwealth Fund. Cambridge, Massachusetts: Harvard University Press, 1957. Price \$1.25.

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THE JOURNAL

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AUGUST, 1957

NUMBER 8

Contributors to This Issue



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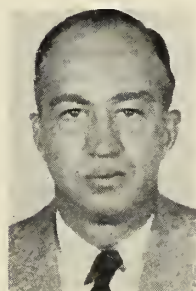
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The Officers Night Dinner Dance is the top social feature of the MSMS Annual Session. This gala party was originated at last year's Annual Session in Detroit.

Sponsored by the State Society and its Woman's Auxiliary, the subscription dinner is for all members of the Michigan State Medical Society, their ladies, and guests. Those who attend this informal affair will experience a gay evening of good fellowship and pleasure.

Governor G. Mennen Williams will be guest speaker at the banquet.

Invitations to all members, with detailed information on the interesting program, will be mailed early in August. Tables may be reserved in groups of six or eight. Individual reservations also are invited.

AMEF CHAIRMAN FOR MICHIGAN



C. E. Umphrey, M.D., Detroit, is the new Michigan Chairman for the American Medical Education Foundation, the national fund through which doctors of medicine are supporting American medical schools.

A Past President of the Michigan State Medical Society and of the Wayne County Medical Society, Dr. Umphrey has assumed his AMEF Chairmanship with his usual vigor. His first message to all MSMS members appeared in last month's JOURNAL.

Dr. Umphrey invites all doctors of medicine to look on the AMEF as their own personally chosen agency to aid them in the judicious administration of funds necessary for the continuation of the medical schools of America. The AMEF is a constant reminder to every doctor of medicine of his debt to his alma mater and to society for his present advantages as a practitioner of medicine.

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HIGHLIGHTS OF EXECUTIVE COMMITTEE OF THE COUNCIL

Meeting of June 20, 1957

- **MSMS Market-Opinion Study of Medical Prepayment Plans.**—Progress report was presented including gratifying information that the *Detroit News* and the *Detroit Times* (total circulation 1,100,000) would feature this MSMS Survey in their Sunday, July 14, editions and would publish the questionnaire and urge the public to execute it. The additional expense to meet this expansion of the Survey was authorized.

The Annual Report of the Committee to Study Comprehensive Prepayment Plan (created by 1956 House of Delegates) may be used as addendum to the Market-Opinion Survey, as well as any other studies or surveys having value to the medical profession of Michigan and to their patients.

- **Medicare.**—According to priority among the states, the re-negotiation of the Medicare contract must be extended to March 31, 1958. Explanation of the necessity for this extension is to be published in the Secretary's letter to all members, which also will invite suggestions from individual members to improve the Medicare program.

- **VA Hometown Medical Care Program.**—Report on final negotiations with the VA were made and the Executive Committee of The Council authorized Michigan Medical Service to sign the contract effective July 1, 1957.

Letters from the Michigan Society of Internal Medicine on Medicare and fee schedule were read, discussed, and referred to the Secretary for reply.

- **Speaker K. H. Johnson, M.D.,** announced the personnel of the Permanent Committee on Fees, a committee created by the House of Delegates: Grover C. Penberthy, M.D., Detroit, Chairman; Joseph F. Beer, M.D., St. Clair; M. A. Darling, M.D., Detroit; Harold F. Falls, M.D., Ann Arbor; W. M. LeFevre, M.D., Muskegon; and M. L. Lichter, M.D., Melvindale.

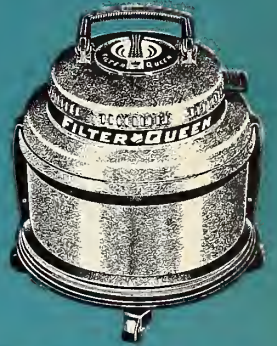
- **Site Committee.**—The interim report of the Site Committee introduced the necessity for erecting the new MSMS Headquarters building as soon as possible—to escape rising building costs. The earmarking of \$10.00 for the MSM building, instead of the present \$5.00, was referred to The Council in July for decision.

- **K. H. Johnson, M.D.,** Lansing, was selected

(Continued on Page 950)

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*Report on file in offices of Health-Mor, Inc.

HIGHLIGHTS OF THE COUNCIL

(Continued from Page 948)

as Chairman of the Testimonial Luncheon for Michigan M.D.'s who are presidents of national medical and health societies, to be held during 1958 Michigan Clinical Institute in Detroit.

- **Ralph W. Shook, M.D.**, was appointed as official MSMS representative to the National Convention of Medical Assistants, October 4-6.
- **The report on the June, 1957, AMA meeting**, New York City, was presented by the Chairman of the Michigan delegation, William A. Hyland, M.D., Grand Rapids.
- **Financial Reports** for the month and bills payable were approved.
- **Appointments.**—M. L. Lichter, M.D., Melvindale, was appointed Chairman of the MSMS Committee on National Defense to fill the place left vacant by the death of W. H. Gordon, M.D.; Josef S. Rozan, M.D., Lansing, was appointed as MSMS representative to the Multiple Sclerosis Center Advisory Committee.
- **Committee Reports.**—The following committee reports were presented: (1) Child Welfare Committee, meeting of May 1; (2) MCI Committee on Arrangements, May 16, and MCI Program Committee, May 28; (3) Rheumatic Fever Control Committee, May 22; (4) Conference on Rehabilitation-Planning Committee, May 22; (5) Permanent Conference Committee, May 22; (6) Study Committee on Package Arrangements between County Medical Societies and Local Welfare Departments, May 22; (7) Mental Health Committee, May 23; (8) Postgraduate Medical Education Committee, May 24; (9) Ethics Committee, June 13; (10) Liaison Committee with University of Michigan, May 15; (11) State Bar Committee on Medical-Legal Problems, April 27.
- **A vote of thanks** was extended to Dr. & Mrs. T. P. Wickliffe, Calumet, for their hospitality to the members of the Executive Committee on the occasion of this meeting.

DANGER OF HEAT INJURY TO RESERVISTS

More than 1,000 cases of heat injury occur each year in Army personnel, and most cases are preventable, according to Maj. Gen. Silas B. Hays, Army Surgeon General.

Heat injury includes heat cramps, heat exhaustion, and heat stroke. Although only a few deaths occur following heat stroke, where death does not occur, the individual may thereafter have a low tolerance for heat conditions, the General said.

In an effort to reduce the number of heat casualties among Army reserve components during the summer months under this year's intensified

training schedule, the Department of the Army has issued a circular on prevention of heat injury. The new directive, Circular 40-8, prepared by the staff of the Office of the Army Surgeon General, requires that recruits not accustomed to physical activity under conditions of high temperatures and humidity should be acclimatized to these conditions by graduated exposure and gradual increase in workload, particularly during basic training.

In addition to heat injury prevention measures mentioned in the Circular, General Hays suggests the following measures which should be applied by supervisors and trainees:

The heavy meal of the day should be served in the evening.

An hour of rest following the noon meal is beneficial. Clothing and equipment should be worn loosely to permit free circulation of air between the uniform and body surface.

Water and salt should be consumed in sufficient amounts to make up for that lost through perspiration.

Training schedules might be modified to place the most strenuous activities during the cooler parts of the day.

COURSE IN PATHOLOGY

The Department of Pathology of Harper Hospital will offer a course in ultramicro chemical methods adapted to hospital laboratory use, October 28 through October 31, 1957. This course will be open to a limited number of pathologists, biochemists, residents in pathology or technologists sponsored by pathologists. Further information may be obtained from Edwin M. Knights, Jr., M.D., Department of Pathology, Harper Hospital.

NATION'S OLDEST ESSAY CONTEST

The trustees of America's oldest medical essay competition, the Caleb Fiske Prize of the Rhode Island Medical Society, announce as the subject for this year's dissertation "Hormonal Relationships in Breast and Prostatic Cancer—Their Practical Application." The dissertation must be typewritten, double spaced, and should not exceed 10,000 words. A cash prize of \$350 is offered. Essays must be submitted by December 31, 1957.

For complete information regarding the regulations write to the Secretary, Caleb Fiske Fund, Rhode Island Medical Society, 106 Francis Street, Providence 3, Rhode Island.

DISTRIBUTION OF U. S. EMPLOYEES

Largest concentration of government workers is in metropolitan Washington, of course—about 230,000. At close of 1956, state having largest number was California, with 237,000. Next in order: New York, 186,000; Pennsylvania, 134,000; Texas, 118,000. All other states had less than 100,000.

(Continued on Page 952)

*optimal dosages for ATARAX,
based on thousands of case histories:*

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*for these **25** adult indications:*

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PHOBIA HYPOCHONDRIASIS TICS FUNCTIONAL G. I. DISORDERS PRE-OPERATIVE ANXIETY
HYSTERIA PRENATAL ANXIETY • AND ADJUNCTIVELY IN CEREBRAL ARTERIOSCLEROSIS
PEPTIC ULCER HYPERTENSION COLITIS NEUROSES DYSPNEA INSOMNIA
PRURITIS ASTHMA ALCOHOLISM DERMATITIS PARKINSONISM PSORIASIS

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TEMPER TANTRUMS HOSPITAL FEAR • AND ADJUNCTIVELY IN ASTHMA ENURESIS

Consider these 3 ATARAX advantages:

- 9 of every 10 patients get release from tension, without mental fogging
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- flexible medication, with tablet and syrup form

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In tiny 10 mg. (orange) and 25 mg. (green) tablets, bottles of 100.

ATARAX Syrup, 10 mg. per tsp., in pint bottles. Prescription only.



CHICAGO 11, ILLINOIS

(Continued from Page 950)

NEW LAW CONSOLIDATES VETS' MEDICAL BENEFITS

All Federal laws relating to hospitalization, medical care, pensions and other benefits for veterans or armed forces have been packaged. President Eisenhower approved HR 53, the bill consolidating statutes administered by Veterans Administration. Within a compact 115-page booklet (of which an excellent index accounts for twenty-one pages), existing laws are set forth on compensable diseases, presumption of service-connection, organization of VA's Department of Medicine and Surgery and salary scales of its personnel, commitment procedures, et cetera.

PHYSICIANS AND DENTISTS LOANS

The physicians and dentists are now, since July 1, 1957, interested in the Small Business Administration, which has so far limited its loans and attention to retail and small industries. The D.M.A. is now making loans available to doctors, dentists, architects, lawyers and other professions in private practice who wish to borrow money to build or remodel offices, purchase equipment, or for any constructive purpose. The Administration last year liberalized the scope of this activity by helping construct proprietary hospitals and nursing homes. This is not being especially publicized; last year there were only thirty applications for hospitals and nursing homes, amounting in all to \$2,622,950—disappointing use.

NEW FISCAL YEAR

The Federal Government's new fiscal year, 1957-1958 sees some new law applications. For the first time in seven years there is no doctor draft law, it expired June 30, 1957. Also expiring was the Salk polio vaccine assistance law. The final report shows \$53,200,000 spent, and 75,000,000 shots given to 29,000,000 children and pregnant women. It is estimated that as of June 21, there are eight and a half million cubic centimeters in storage.

A new formula for assistance is in effect for persons receiving public assistance, including disability insurance for persons over fifty years.

MICHIGAN'S VETERANS HOME TOWN CARE PROGRAM

Effective July 1, 1957, with the approval of The Council of the Michigan State Medical Society, a new contract has been entered into with the Veterans Administration. Michigan Medical Service will continue to administer the program. Much of the work formerly performed by Michigan Medical Service will now be done by the Regional Office of the Veterans Administration in Detroit.

Some changes have been made relative to ob-

taining authorizations and billing for V.A. patients with service-connected disabilities. In some cases (Long Term-LT), you will receive one authorization for the full year and in others, a new authorization will be required every month. This monthly authorization must be requested *from the Veterans Administration Regional Office direct*. Their full fiscal year, or "Long Term authorization," as it is known, will have with it an "Invoice for Medical and Ancillary Service" for each month, and one quarterly report of medical treatment form (10-2690A).

You should prepare one invoice form to report each month's services and it should be forwarded to Michigan Medical Service, c/o Veterans Department, 441 East Jefferson Avenue, Detroit 26, Michigan, as payments for services will continue to be made by Michigan Medical Service after the V.A. advances the funds. This procedure may slow up payments for services somewhat.

The quarterly report of medical treatment should be sent to the Veterans Administration direct.

Cases referred to as "short-term" will require that you request a new authorization from the V.A. each month. Upon your request to the V.A., on Form 10-2690C ("Request to Continue Treatment"), you will receive from the V.A. Form 10-2567 ("Authorization for Medical and Ancillary Services"), which you should complete and return to Michigan Medical Service as at present.

Each month, the same procedure is to be repeated.

Please be advised that the Veterans Administration has approved a fee increase of \$2.50 on Code No. 9106A, X-ray, Chest, Flat Plate, effective July 1, 1957. The new fee is \$7.50.

COSTS FOR MEDICAL CARE PROPORTIONATE

A brief research report by Social Security Administration (Division of Program Research) states that, in 1955, out of every \$100 of disposable personal income \$4.14 was required to pay for medical care. In 1948 the ratio was \$3.89 per \$100. Interesting sidelight: Despite great increase in hospitalization insurance coverage since 1948, out-of-pocket payments to hospitals have declined negligibly. Hospitals in 1955 were getting \$1.24 for every \$100 of disposable income: 62 cents from insurance and 62 cents direct from patients. This compares with 89 cents per \$100 in 1948, of which 24 cents came from insurance and remaining 65 cents from patients' pockets.

Disorders of the heart, blood vessels and related organs caused over 850,000 deaths last year—more than half the total number of deaths in this country, Health Information Foundation reports.

PATHIBAMATE

Comments on PATHIBAMATE from clinical investigators

• "I find it easy to keep patients using the drug continuously and faithfully. I feel sure this is due to the desirable effect of the tranquilizing drug."⁵

• "The results in several people who were previously on belladonna-phenobarbital preparations are particularly interesting. Several people volunteered that they felt a great deal better on the present medication and noted less of the loginess associated with barbiturate administration."⁶

• PATHIBAMATE... "will favorably influence a majority of subjects suffering from various forms of gastrointestinal neurosis in which spasmodic manifestations and nervous tension are major clinical symptoms."⁷

• "In the patients with functional disturbances of the colon with a high emotional overlay, this has been to date a most effective drug."⁵

References: 1. Borrus, J. C.: *M. Clin. North America*, 1957. 2. Gillette, H. E.: *Internat. Rec. Med. & G. P.* 69:453, 1956. 3. Pennington, V. M.: *J.A.M.A.*, 1957. 4. Cayer, D.: Prolonged Anticholinergic Effect of Duodenal Ulcer. *Am. J. Dig. Dis.* 1:301-309, 1956. 5. McGlone, F. B.: Personal Communication to Lederle Laboratories. 6. Texter, E. C., Jr.: Personal Communication to Lederle Laboratories. 7. Bauer, H. G. McGavack, T. H.: Personal Communication to Lederle Laboratories.

Supplied: Bottles of 100 and 1000

Administration and Dosage: 1 tablet three times a day 4 times and 2 tablets at bedtime. Full information on PATHIBAMATE available on request, from your local Lederle representative.

R_x

Pathibamate #100
Sig: 1 tab. t.i.d. at mealtime.
2 tabs. at bedtime.



AMA Washington Letter

THE MONTH IN WASHINGTON

The economy drive to the contrary notwithstanding, health spending by the Department of Health, Education, and Welfare for the fiscal year that began this July already is assured of surpassing last year's record by some \$33 million. This assumes, of course, that no further requests will be made by HEW for supplemental funds, a practice common in government for many years.

Research programs were the most favored by legislators, many of whom spoke out against federal spending by other agencies. But when the health budget came up for debate, the economy oratory subsided.

In only one instance was a health program cut back. And to the surprise of many, it occurred in the Senate which traditionally restores budget cuts originating in the House. A sum of \$45 million was voted, instead of the House-approved \$50 million, for grants to states for sewage treatment works construction. But then the Senate wrote in language permitting states to get their maximum allotments a full year after the fiscal year ends.

The Hill-Burton hospital construction program received \$3.8 million less than last year but only because the administration asked for \$121.2 million instead of the \$125 million appropriated last year.

The National Cancer Institute received the largest dollar increase of any health item in the budget. The increment was \$8 million over last year. The administration had asked for \$48.4 million, the House voted \$46.9 million, and the Senate raised this to \$58.5. It was finally compromised at \$56.4 million.

Congress obviously agreed with the views expressed by the Senate Appropriations Committee: "... the committee is fully aware that it is providing funds for cancer research, the outcome of which is unknown. On the judgment of those who are scientifically most competent, the committee is fully willing to risk the investment on the ground that the chance of a big payoff is a reasonable one. Such risks are inherent in research."

The Institute of Arthritis and Metabolic Diseases fared well, too, getting a total of \$20,385,000 compared with last year's \$17,885,000. And the Senate Committee charged the institute with taking leadership in research on effects of radiation on the human organism.

The Mental Health Institute's spending has been going steadily upward, and this year it was given another boost with a final appropriation of \$39,217,000, an increase of about \$4 million. Other research totals for the current year: National Heart Institute, \$35,936,000; Neurology and

Blindness Institute, \$21,387,000; Allergy and Infectious Disease Institute, \$17,400,000.

On only one score did the research advocates lose out. The House view prevailed in conference on the setting of a 15 per cent ceiling on additional overhead costs allowed schools and other institutions getting federal grants. This question which drew considerable attention in hearings is likely to be reopened. Congress wants a General Accounting Office study by the end of this year.

In voting a \$5 million increase (to \$22,592,000) for general public health assistance to the states, Congress was reaffirming its support of helping local health departments increase their professional staffs and broaden their services. The Senate Committee report contained this significant language: "... with a population increase of more than 20 million during the past decade, there are no more organized health departments than there were 10 years ago. This means that 18 million people are living in areas with no full-time organized community health services, and millions more live in areas where such services are only fragmentary."

A few days later, the Public Health Service announced plans for a broad survey of rural health needs, particularly in sparsely settled areas. It picked for its first study Kit Carson County, Colorado, an area known for its scattered farm population, low income level and adverse climatic conditions.

NOTES:

The President has signed into law a two-year revision of the doctor draft law permitting selective call-up of physicians to age thirty-five, if they were deferred from regular draft service to complete professional training.

The poliomyelitis vaccine act expired July 1 with all but \$400,000 of \$53.6 million taken up by states for inoculation programs. An estimated 29 million children and pregnant women received 70 million injections.

The Public Health Service has conferred with the American Medical Association on medical manpower plans in event of an epidemic of the new Far East influenza.

The National Library of Medicine no longer is lending books and other material over the counter to individuals; requests must be channeled through other libraries.

The administration bill on federal workers health insurance has been introduced; it combines both basic and major medical coverage.

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derivative of
Rauwolfia
canescens

Harmonyl*

combines the full effectiveness of the rauwolfias
with a new degree of freedom from side effects

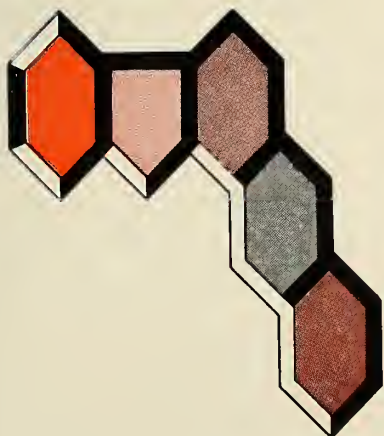
Harmonyl makes rauwolfia more useful in your everyday practice. Two years of clinical evaluation have shown this new alkaloid exhibits significantly fewer and milder side effects than reserpine. Yet, Harmonyl compares to the most potent forms of rauwolfia in effectiveness.

Most significant: Harmonyl causes less mental and physical depression—and far less of the lethargy seen with many rauwolfia preparations.

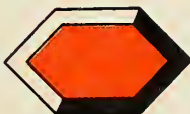
Patients became more lucid and alert, for example, in a study¹ of chronically ill, agitated senile cases treated with Harmonyl. And these patients were completely free from side effects—although a group on reserpine developed such symptoms as anorexia, headache, bizarre dreams, shakes, nausea.

Harmonyl has also demonstrated its potency and relative freedom from side effects in hypertension. In a study comparing various forms of rauwolfia², the investigators reported deserpidine “an affective agent in reducing the blood pressure of the hypertensive patient both in the mild to moderate, as well as the severe form of hypertension.” They also noted that side reactions were “less annoying and somewhat less frequent” with this new alkaloid. Other studies confirm that few cases of giddiness, vertigo or sense of detached existence or disturbed sleep are seen with Harmonyl.

Professional literature on this unique rauwolfia derivative is available upon request. Harmonyl is supplied in 0.1-mg., 0.25-mg. and 1-mg. tablets. **Abbott**



References: 1. Communication to Abbott Laboratories, 1956. 2. Moyer, J. H. et al: Deserpidine for the Treatment of Hypertension, *Southern Medical J.*, 50:499, April, 1957.



* Trademark for Deserpidine, Abbott

Fifty-Year Club in Tenth Year

Since 1947, 227 Michigan doctors of medicine have joined the MSMS Fifty-Year Club.

In Grand Rapids this September, additional nominees will be inducted into the "exclusive" group. The club is exclusive because of the difficult requirement that the physician must have practiced medicine for half a century—and only a handful of the state's 8,458 M.D.'s can qualify each year.

County medical societies have sent in their nominations for membership and the House of Delegates will receive the honorees on Monday, September 23, at the Pantlind Hotel.

Ten years ago, when the idea of honoring our senior doctors was born, a total of ninety-seven M.D.'s were made charter members of the Fifty-Year Club.

The following is a listing of every Fifty-Year Awardee through September, 1956, with the year of induction:

- *C. D. Aaron, M.D., Detroit, 1947
- *William F. Acker, M.D., Monroe, 1951
- *Emil Amberg, M.D., Detroit, 1947
- Bruce Anderson, M.D., Pontiac, 1950
- *J. H. Andries, M.D., Detroit, 1947
- *A. B. Armsbury, M.D., Marine City, 1947
- Noah E. Aronstam, M.D., Detroit, 1948
- *J. A. Attridge, M.D., Port Huron, 1947
- George Baert, M.D., Grand Rapids, 1947
- *J. A. Baird, M.D., Flint, 1947
- *W. R. Ballard, M.D., Bay City, 1947
- J. W. Barnabee, M.D., Kalamazoo, 1951
- *Wm. E. Barstow, M.D., St. Louis, 1955
- *C. M. Baskerville, M.D., Mt. Pleasant, 1948
- *George Bates, M.D., Kingston, 1947
- *Robert Beattie, M.D., Detroit, 1953
- *Henri Belanger, M.D., River Rouge, 1947
- E. G. Bellinger, M.D., Lansing, 1956
- Albert A. Berstein, M.D., Detroit, 1954
- Alexander W. Blain, M.D., Detroit, 1956
- Wm. E. Blodgett, M.D., Detroit, 1954
- Franz L. Blumenthal, M.D., Detroit, 1953
- W. P. Bope, M.D., Decatur, 1947
- *A. O. Boulton, M.D., Gladwin, 1947
- Phillip D. Bourland, M.D., Calumet, 1956
- George H. Boyce, M.D., Iron Mountain, 1954
- George F. Brewington, M.D., Mohawk, 1947
- *H. B. Britton, M.D., Ypsilanti, 1948
- Wm. H. Brock, M.D., Saginaw, 1951
- Jacob D. Brook, M.D., Grandville, 1953
- *Clark D. Brooks, M.D., Detroit, 1955
- *F. W. Brown, M.D., Watervliet, 1949
- D. H. Burley, M.D., Almont, 1947
- L. J. Burch, M.D., Mt. Pleasant, 1947
- H. W. Cadieux, M.D., Detroit, 1947
- *A. L. Callery, M.D., Port Huron, 1947
- *A. M. Campbell, M.D., Grand Rapids, 1947
- Duncan A. Campbell, M.D., Detroit, 1948

*Deceased.

- C. D. Chapin, M.D., Columbiaville, 1954
- *W. E. Chapman, M.D., Cheboygan, 1947
- *J. H. Charters, M.D., Flint, 1947
- *Nancy R. Chenoweth, M.D., Escanaba, 1947
- *W. R. Chittick, M.D., Spring Valley, Calif., 1947
- *S. W. Church, M.D., Marshall, 1947
- *G. E. Clark, M.D., Detroit, 1947
- Julius C. Clippert, M.D., Dearborn, 1951
- W. E. Colbath, M.D., Adrian, 1949
- G. C. Conkle, M.D., Boyne City, 1951
- G. A. Conrad, M.D., Sault Ste. Marie, 1951
- J. E. Cooper, M.D., Battle Creek, 1952
- *W. J. Cree, M.D., Detroit, 1947
- Alexander Cruikshank, M.D., Detroit, 1947
- J. E. Cullett, M.D., Roseville, 1951
- M. E. Danforth, M.D., Detroit, 1952
- James D. Davis, M.D., Detroit, 1948
- *T. E. DeGurse, M.D., Marine City, 1947
- William DeKleine, M.D., Lansing, 1956
- *A. J. DeNike, M.D., Detroit, 1953
- John C. Dodds, M.D., Detroit, 1953
- C. P. Doyle, M.D., Lansing, 1947
- *Karl Dubpernell, M.D., Detroit, 1947
- *F. C. Dunn, M.D., Lansing, 1949
- *S. V. Dusseau, M.D., Erie, 1947
- Herman C. Emmert, M.D., Detroit, 1954
- Bert U. Estabrook, M.D., Detroit, 1953
- Lucious A. Farnham, M.D., Pontiac, 1956
- Carl Fettig, M.D., Detroit, 1949
- *Walter D. Ford, M.D., Detroit, 1949
- *G. H. Frace, M.D., St. Johns, 1948
- B. L. Franklin, M.D., Remus, 1952
- *G. E. Frothingham, M.D., Detroit, 1947
- C. B. Fulkerson, M.D., Kalamazoo, 1953
- Cyrus B. Gardner, M.D., Lansing, 1955
- *H. G. Garner, M.D., Detroit, 1947
- Nathaniel Gates, M.D., Detroit, 1955
- J. W. Gethings, M.D., Battle Creek, 1951
- James C. Gibson, M.D., Detroit, 1947
- *John R. Giffen, M.D., Bangor, 1947
- *R. W. Gillman, M.D., Detroit, 1947
- *J. E. Gleason, M.D., Detroit, 1953
- Benjamin T. Goodfellow, M.D., Flint, 1955
- C. S. Gorsline, M.D., Battle Creek, 1951
- F. E. Grant, M.D., Kalamazoo, 1947
- W. A. Grant, M.D., Milford, 1952
- Frank A. Grawn, M.D., Ypsilanti, 1949
- Newton H. Greenman, M.D., Decatur, 1949
- *W. T. S. Gregg, M.D., Calumet, 1947
- *Arthur Griggs, Sr., M.D., Saginaw, 1947
- J. C. Grosjean, M.D., Bay City, 1951
- *B. C. Hall, M.D., Pompeii, 1947
- *Joshua Hanser, M.D., Detroit, 1956
- *L. J. Harris, M.D., Jackson, 1947
- *Hugh Harrison, M.D., Detroit, 1947
- L. L. Harrison, M.D., Niles, 1956
- Clarence L. Hathaway, M.D., Lake Orion, 1954
- Wilfrid Haughey, M.D., Battle Creek, 1956
- James Henry, M.D., Grand Rapids, 1950
- H. A. Herzer, M.D., Albion, 1952
- *A. B. Hewes, M.D., Adrian, 1953
- L. J. Hirschman, M.D., Detroit, 1949
- *Fred J. Hohn, M.D., Saginaw, 1955
- Augustus Holm, M.D., LeRoy, 1951

FIFTY-YEAR CLUB IN TENTH YEAR

- *W. H. Honor, M.D., Wyandotte, 1953
- G. B. Hoops, M.D., Detroit, 1951
- *James L. Houston, M.D., Swartz Creek, 1951
- Edward V. Howlett, M.D., Pontiac, 1956
- *W. F. Hoyt, M.D., Paw Paw, 1947
- E. C. Hughes, M.D., Bay City, 1947
- A. Milton Humber, M.D., Detroit, 1948
- *A. M. Hume, M.D., Owosso, 1947
- *W. G. Hutchinson, M.D., Bloomfield Hills, 1949
- W. J. Jend, M.D., Detroit, 1952
- Ralph S. Jiroch, M.D., Saginaw, 1955
- *J. M. Jones, M.D., Bay City, 1947
- *W. E. Keane, M.D., Detroit, 1952
- *J. A. Keho, M.D., Bay City, 1947
- John Kemp, M.D., Saginaw, 1947
- *William Kerr, M.D., Bay City, 1947
- Wm. T. King, M.D., Ahmeek, 1951
- J. R. W. Kirton, M.D., Calumet, 1948
- Charles W. Knaggs, M.D., Detroit, 1953
- *Herbert W. Landon, M.D., Monroe, 1948
- *Clarence P. Lathrop, M.D., Hastings, 1947
- *W. W. Lathrop, M.D., Jackson, 1947
- H. H. Learmont, M.D., Croswell, 1950
- *Abraham Leenhouts, M.D., Holland, 1948
- *Simeon LeRoy, M.D., Grand Rapids, 1948
- Simon Levine, M.D., Houghton, 1951
- L. A. Lewis, M.D., Manistee, 1947
- *David Littlejohn, M.D., Dearborn, 1947
- George W. Logan, M.D., Flushing, 1951
- Horace H. Loveland, M.D., Tecumseh, 1951
- *Henry A. Luce, M.D., Detroit, 1955
- Frank E. Luton, M.D., St. Johns, 1951
- Richard C. Lyle, M.D., Bridgeport, 1955
- A. E. MacGregor, M.D., Battle Creek, 1951
- Donald MacIntyre, M.D., Big Rapids, 1947
- *Donald K. MacQueen, M.D., Laurium, 1947
- E. A. Martindale, M.D., Hillsdale, 1949
- *Reuben Maurits, M.D., Grand Rapids, 1947
- *J. C. Maxwell, M.D., Paw Paw, 1947
- D. J. McColl, M.D., Port Huron, 1947
- Allan McDonald, M.D., Detroit, 1953
- O. W. McKenna, M.D., Flint, 1947
- *W. E. McNamara, M.D., Lansing, 1953
- Donald H. McRae, M.D., Detroit, 1955
- Richard E. Mercer, M.D., Detroit, 1948
- H. G. Merz, M.D., Lapeer, 1947
- Henry Meyer, M.D., Saginaw, 1947
- A. H. Miller, M.D., Gladstone, 1955
- *G. W. Moll, M.D., Escanaba, 1947
- Willard Monfort, M.D., Highland Park, 1949
- G. W. Moore, M.D., Bay City, 1951
- *Esli T. Morden, M.D., Adrian, 1951
- E. T. Morris, M.D., Nashville, 1952
- John B. Morton, M.D., Detroit, 1948
- L. P. Munger, M.D., Hart, 1947
- C. D. Munro, M.D., Jackson, 1947
- J. E. Munro, M.D., Jackson, 1953
- *Dean W. Myers, M.D., Ann Arbor, 1949
- *J. H. Nicholson, M.D., Hart, 1947
- *Albert Noordewier, M.D., Grand Rapids, 1951
- *A. K. Northrop, M.D., Detroit, 1947
- Charles S. Norton, M.D., Detroit, 1954
- Charles Norton, M.D., Detroit, 1950
- David H. O'Donnell, M.D., Detroit, 1947
- L. W. Oliphant, M.D., Ann Arbor, 1949
- *W. R. Olmsted, M.D., Detroit, 1953
- John W. Orr, M.D., Fenton, 1956
- F. W. Ostrander, M.D., Freeland, 1951
- *Gertrude O'Sullivan, M.D., Mason, 1947
- *Robert J. Palmer, M.D., Detroit, 1949
- *E. J. Panzner, M.D., Detroit, 1947
- *B. Morgan Parker, M.D., Utica, 1951
- *W. R. Parker, M.D., Detroit, 1947
- W. T. Parker, M.D., Owosso, 1951
- *Marion F. Parrish, M.D., Sturgis, 1947
- Christopher G. Parnall, M.D., Ann Arbor, 1955
- Louis K. Peck, M.D., Lake City, 1947
- R. L. Pfeiffer, M.D., Detroit, 1953
- Frank Poole, M.D., Saginaw, 1947
- Lunette I. Powers, M.D., Muskegon, 1947
- George R. Pray, M.D., Jackson, 1950
- Edward B. Ramsey, M.D., Detroit, 1950
- *H. E. Randall, M.D., Flint, 1947
- G. P. Raynale, M.D., Birmingham, 1952
- *G. L. Renaud, M.D., Detroit, 1947
- R. Milton Richards, M.D., Detroit, 1948
- J. W. Rigterink, M.D., Grand Rapids, 1951
- *Arthur J. Roberts, M.D., Jackson, 1947
- *Melvin D. Roberts, M.D., Hancock, 1956
- Mortimer Roberts, M.D., Grand Rapids, 1947
- *A. L. Robinson, M.D., Burr Oak, 1952
- Michael Ryan, M.D., Saginaw, 1947
- E. D. Sage, M.D., Kalamazoo, 1951
- Edward O. Sage, M.D., Detroit, 1950
- *Thomas M. Sanford, M.D., Lansing, 1947
- *Edward Sawbridge, M.D., Stephenson, 1947
- R. L. Schorr, M.D., Detroit, 1947
- Alvin H. Seibert, M.D., Grosse Pointe Park, 1955
- H. T. Sethney, M.D., Menominee, 1955
- DeWitt L. Sherwood, M.D., Detroit, 1954
- *B. R. Shurly, M.D., Detroit, 1947
- *C. E. Simpson, M.D., Detroit, 1953
- Frank J. Sladen, M.D., Detroit, 1956
- Claude A. Smith, M.D., Dearborn, 1956
- W. J. Smith, M.D., Cadillac, 1955
- *Jeanne C. Solis, M.D., Ann Arbor, 1947
- *I. L. Spalding, M.D., Hudson, 1949
- Wm. J. Stapleton, Jr., M.D., Detroit, 1950
- Clarence T. Starker, M.D., Pontiac, 1956
- Thomas C. Starrs, M.D., Detroit, 1956
- Lewis L. Stewart, M.D., Jackson, 1950
- E. L. Thirlby, M.D., Traverse City, 1953
- J. O. Thomas, M.D., North Branch, 1947
- *A. B. Thompson, Sr., M.D., Grand Rapids, 1947
- *Alexander Thomson, M.D., Detroit, 1947
- *Otto Toepel, M.D., Detroit, 1947
- *M. J. Uloth, M.D., Ortonville, 1952
- L. N. Upjohn, M.D., Kalamazoo, 1951
- *Thomas Van Urk, M.D., Kalamazoo, 1948
- J. E. G. Waddington, M.D., Detroit, 1947
- *E. C. Warren, M.D., Bay City, 1947
- *J. A. Wessinger, M.D., Ann Arbor, 1947
- J. B. Whinery, M.D., Grand Rapids, 1947
- *W. G. Wight, M.D., Yale, 1947
- E. P. Wilbur, M.D., Kalamazoo, 1947
- *Herbert H. Wiley, M.D., Algonac, 1951
- Clayton Willison, M.D., Sault Ste. Marie, 1947
- Leslie L. Willoughby, M.D., Flint, 1955
- *H. R. Wilson, M.D., Saginaw, 1951
- *W. J. Wilson, Sr., M.D., Detroit, 1947
- W. H. Winchester, M.D., Flint, 1951
- G. E. Winter, M.D., Jackson, 1947
- Robert A. C. Wollenberg, M.D., Detroit, 1955
- W. J. Wright, M.D., Ypsilanti, 1949
- A. S. Youngs, M.D., Kalamazoo, 1947
- Aloysius J. Zaremba, M.D., Bay City, 1955

AMA News Notes

ENDORSE PRINCIPLE OF PERIODIC HEALTH APPRAISAL OF CHILDREN

A new program endorsing periodic health appraisal for children sponsored by the National Congress of Parents and Teachers has won support of the AMA's Council on Medical Service. At a recent meeting, the Council voted to approve the following resolution: "The Committee on Maternal and Child Care of the Council on Medical Service, AMA, reaffirms its approval of the principle of continuous health supervision of children from birth through their school experience rather than only a program of a single appraisal on school entrance. It also recommends that, where possible, this should be done by the physician and dentist who normally serve that child and family, preferably his personal physician and dentist. The Committee welcomes the support of the National Congress of Parents and Teachers."

AMA STUDIES CHEMICAL LAWS

A hodge-podge of state and federal laws regulating the labeling of hazardous chemicals and the need for a uniform chemical law recently were revealed by an American Medical Association study. Sponsored jointly by the AMA's Committee on Toxicology and Law Department, the study was made in preparation for drafting a model chemical labeling law. A conference of interested representatives of government, industry and medicine will be called this fall to draft a model law which then can be submitted to legislative bodies.

The proposed legislation is intended to reduce careless and ignorant handling of potentially harmful products in and around the home, small businesses and other areas where control of over-exposure to chemicals is not as efficient as in the manufacturing process. This law will require informative labeling, including listing of possibly harmful ingredients, their potentialities for danger, directions for safe use and first-aid instructions.

"TODAY'S HEALTH" CONTEST WINNERS HONORED

Top prizes for selling the largest number of subscriptions in the *Today's Health* 1957 Woman's Auxiliary contest went to the states of New Mexico, Kansas, Indiana and Pennsylvania.

The forty dollar awards were presented in June during the Woman's Auxiliary convention in New York City. This has been one of the most successful contest years, reports the national TH chairman, Mrs. C. Rodney Stoltz of Watertown, S. D. During the period from June 1, 1956, through midnight April 15, 1957, a total of 75,409 and 6/12 subscription contest credit points were earned—an increase of 18,849 and 7/12 over the number of credits produced the previous year.

State winners and their chairmen: *Group I* (membership 1 to 1,000)—New Mexico, Mrs. Frank B. Nordstrom, Farmington; *Group II* (1,001 to 2,000)—Kansas, Mrs. Francis Basham, Eureka; *Group III* (2,001 to

3,000)—Indiana, Mrs. Jack Shields, Brownstown; *Group IV* (3,001 or over)—Pennsylvania, Mrs. LeRoy Cooper, York.

County winners and their chairmen: *Group I* (membership of 1 to 35): 1st prize—Huron county, Ohio, Mrs. T. H. Smith, New London; 2nd prize—Greenwood-Woodson counties, Kan., Mrs. Robert Obourn, Eureka; Labette county, Kan., Mrs. A. L. Berggren, Chetopa. *Group II* (36 to 75): 1st prize—Larimer county, Colo., Mrs. Duane Hartshorn, Fort Collins; 2nd prize—Cobb county, Ga., Mrs. Edgar A. Vaughan, Marietta; 3rd prize—Indiana county, Penna., Mrs. Ralph Waldo, Indiana, Penna.

Group III (76 to 100): 1st prize—Clark county, Ohio, Mrs. Donald Guyton, Springfield; 2nd prize—Escambia county, Fla., Mrs. J. W. Douglas, Pensacola; 3rd prize—Yellowstone county, Mont., Mrs. Wayne Roney, Billings. *Group IV* (101 or over): 1st prize—Sedgwick county, Kan., Mrs. Paul A. Lovett, Wichita; 2nd prize—St. Joseph county, Ind., Mrs. Robert F. Reed, Mishawaka; 3rd prize—Broward county, Fla., Mrs. Richard D. Owen, Fort Lauderdale.

AMA ISSUES NEW GUIDES ON VOLUNTARY AGENCIES

A new "Guides to Relationships Between Medical Societies and Voluntary Health Agencies" has been published by the American Medical Association. Prepared by the Committee on Relationships Between Medicine and Allied Health Agencies, the booklet points up the nature of voluntary health agencies, the questions that need to be answered in evaluating such agencies, the medical society's obligations to voluntary agencies, and the voluntary agency's obligations to the medical society.

Last fall the committee issued a brief outline on this subject which stimulated such interest among medical societies that the more detailed and comprehensive set of guides was prepared. The committee is composed of Drs. Sidney J. Shipman, San Francisco, chairman; Paul A. Davis, Akron; Paul C. Swenson, Philadelphia; Leonard W. Larson, Bismarck, N. D.; Dwight H. Murray, Napa, Calif.; Louis A. Buie, Rochester, Minn., and David A. Wood, San Francisco.

Copies of the Guide may be secured from the Council on Medical Service.

FILM DESCRIBES ROLE OF RADIOLOGIST ON MEDICAL TEAM

A new color motion picture dedicated to the radiologist—a physician who specializes in the use of x-rays, radium and radioactive materials in the diagnosis and treatment of diseases—has been added to AMA's Film Library. "First a Physician" tells the dramatic story of what a radiologist is, what he does and how he serves patients. In this twenty-seven-minute film, you'll

(Continued on Page 1060)

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(approx. 5 mg. per drop)

*Reg. U. S. Pat. Off.

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Half Million Persons Reached by MSMS Study

The MSMS study of public wants and needs in medical-surgical coverage by insurance and prepayment plans has asked for opinions from more than a half million Michigan citizens.

In addition to the 60,000 survey questionnaires sent to householders by the Michigan Health Council, which conducted the public survey for the MSMS, publication of the survey form in two metropolitan newspapers provided unprecedented coverage.

While the mail survey by the Michigan Health Council received the most public attention, other survey methods were employed and additional information areas probed.

A highly accurate and detailed personal inter-

view survey was conducted by the Market-Opinion Research Company of Detroit, in which one thousand households throughout the state were contacted personally by trained researchers.

Also, by means of a special questionnaire, the doctors were asked their views on the operational methods and philosophies of Michigan Medical Service (Blue Shield).

In addition, there was an evaluation of the public's willingness to pay for the services they voted most essential, as well as an estimation of the public's medical needs.

The public questionnaire is reprinted here just as it appeared to over 500,000 Michigan residents.

MICHIGAN HEALTH COUNCIL

706 North Washington Ave.

Lansing 6, Michigan

July, 1957

Return to:

Michigan Health Council

Box 671

Lansing 3, Michigan

Dear Friend:

This is your chance to tell doctors exactly what kind of medical expense protection you want. You are one of 50,000 persons in Michigan who has been selected to voice an opinion on voluntary, prepaid medical and surgical care plans and health insurance coverage. Since you, as a Michigan citizen, are a partner in any plan or system of medical care, we feel that you should have this opportunity to state your views. You will not subsequently be contacted personally as a result of your answers.

It's one sure way Michigan's doctors of medicine can find out what you really want. That's why the Michigan Health Council in cooperation with the Michigan State Medical Society is sending you this questionnaire. Would you please take a few minutes to fill it out completely and return it? THANK YOU.

J. K. Altland, M.D., President
Michigan Health Council

All answers are strictly confidential.

Check the answer that expresses your opinion.

1. Do you have any kind of insurance or plan that pays all or part of your or your family's medical and surgical expenses?

Yes ☐ 1 No ☐ 2 1

If "Yes," go to question number 3.

If "No," answer question number 2, then skip to question number six (6) and remaining questions.

2. Would you please check the most appropriate answer as to why you and your family are not now covered by any surgical and medical insurance?

Have had no opportunity to obtain ☐ 1 2

Have had unsatisfactory experience with insurance ☐ 2

Too expensive ☐ 3

Unfamiliar with coverage offered by policies ☐ 4

Other ☐ 5

If you checked "other," please fill in reason _____ 3

3. With what medical-surgical plan or insurance company are you or your family now covered in whole or in part? (If more than one policy is held, check each company.)

Michigan Medical Service (Blue Shield) ☐ 1 4

Metropolitan Life Insurance Company ☐ 2

Bankers Life & Casualty Company (White Cross) ☐ 3

Travelers Insurance Company ☐ 4

Mutual Benefit Health and Accident Association (Mutual of Omaha) ☐ 5

Other ☐ 6

If you checked "other" please fill in name of company.) _____

Is any part or all of the cost paid for by your employer? ☐ 1 Part ☐ 2 None ☐ 3

Does this plan(s) cover: Self only ☐ 1 Husband & Wife ☐ 2

Family ☐ 3

HALF MILLION PERSONS REACHED BY MSMS STUDY

4. Have you ever had to call upon your insurance company (or companies) to pay benefits?
Yes ☐ 1 No. ☐ 2 8

5. The last time you used your medical insurance, were there any medical or surgical expenses (other than hospital expense) that were *not* covered by your insurance?
Yes ☐ 1 No. ☐ 2 9
If so, what were they? _____
_____ 10

About how much did you pay? _____ 11

6. The benefits normally covered by many medical insurance policies for services provided in the hospital are listed below. (THESE DO NOT INCLUDE HOSPITALIZATION EXPENSES). Such a policy would cost your family approximately \$5.00 a month or \$55.00 per year.
(Remember, this cost estimation does not include your hospitalization. For example, Blue Shield pays medical expenses and Blue Cross pays hospital expenses—other companies often have separate policies too.)

Surgical	Emergency first aid
Fractures and dislocations	Anesthetic
Maternity	X-ray

Which of the following benefits would you MOST like to have ADDED to the coverage of the above policy? (Check one or as many as you would like to add.)

Medical benefits in hospital:	Would Add
Blood transfusions	<input type="checkbox"/> 1 12
X-ray (for outpatients)	<input type="checkbox"/> 2
Diagnostic services	<input type="checkbox"/> 3

Medical treatment in doctor's office:	
Diagnostic service	<input type="checkbox"/> 1 13
Surgical	<input type="checkbox"/> 2
Fractures and dislocations	<input type="checkbox"/> 3
X-ray	<input type="checkbox"/> 4
Dressings and casts	<input type="checkbox"/> 5

Treatment by doctors in your home:	
Emergency house calls	<input type="checkbox"/> 1 14
Dressings and casts	<input type="checkbox"/> 2

Do you think nursing care should be covered for:

Private nurses in hospital	<input type="checkbox"/> 1 15
Nursing care in home	<input type="checkbox"/> 2

7. If the benefits you checked in question 6 were added to such a policy, how much increase in premium per month do you think you would be willing to pay?
\$ _____ per month ☐ 16-17

8. In order to keep down the premium cost caused by the added benefits, would you want to drop any of the benefits normally included:

Would Drop	
Surgical	<input type="checkbox"/> 1 18
Fractures and dislocations	<input type="checkbox"/> 2
Maternity	<input type="checkbox"/> 3
Emergency first aid	<input type="checkbox"/> 4
Anesthetic	<input type="checkbox"/> 5
X-ray	<input type="checkbox"/> 6

9. In order to reduce the monthly cost of medical-surgical insurance would you favor paying a deductible amount of the expense per each illness or

disability (similar to deductible feature of automobile insurance)?

Yes ☐ 1 No ☐ 2 19

(a) If "YES," how much deductible expense would you be willing to pay?

\$25.00	<input type="checkbox"/> 1 20
\$50.00	<input type="checkbox"/> 2
\$100.00	<input type="checkbox"/> 3

10. Should prepaid medical and surgical plans or insurance cover only the major cost items of an illness or operation, or should they cover all minor items as well?

Major costs only	<input type="checkbox"/> 1 21
Minor costs and major costs	<input type="checkbox"/> 2
Minor costs only	<input type="checkbox"/> 3

11. So that your answers may be grouped with others in the analysis, please check the categories below describing yourself:

Single	<input type="checkbox"/> 1 22	Your place of residence:	
Married	<input type="checkbox"/> 2	Rural	<input type="checkbox"/> 1 23
Divorced	<input type="checkbox"/> 3	Town under 2,500	<input type="checkbox"/> 2
Widowed	<input type="checkbox"/> 4	Town 2,500-9,999	<input type="checkbox"/> 3
		Town 10,000-24,999	<input type="checkbox"/> 4
Female	<input type="checkbox"/> 1 25	Town 25,000-99,999	<input type="checkbox"/> 5
Male	<input type="checkbox"/> 2	Town 100,000-500,000	<input type="checkbox"/> 6
		Town over 500,000	<input type="checkbox"/> 7

Age group:

15-24	<input type="checkbox"/> 1 24
25-34	<input type="checkbox"/> 2
35-44	<input type="checkbox"/> 3
45-54	<input type="checkbox"/> 4
55-64	<input type="checkbox"/> 5
Over 64	<input type="checkbox"/> 6

Name of county you live in: _____ 26-27

12. And also these two facts about your immediate family:

How many children under 18 years of age? _____ 28

What was your family income last year (1956)?

Under \$2,500	<input type="checkbox"/> 1	\$7,000-9,999	<input type="checkbox"/> 4 29
\$2,500-4,999	<input type="checkbox"/> 2	\$10,000 & over	<input type="checkbox"/> 5
\$5,000-6,999	<input type="checkbox"/> 3		

13. And about the man or chief breadwinner in your household:

Type of occupation:	Hourly rated
Manager or owner	<input type="checkbox"/> 1 worker <input type="checkbox"/> 5 30
Executive professional	<input type="checkbox"/> 2 Housewife <input type="checkbox"/> 6
Farmer or farm worker	<input type="checkbox"/> 3 Retired <input type="checkbox"/> 7
White collar employe	<input type="checkbox"/> 4 Unemployed <input type="checkbox"/> 8

And finally, what, if any, occupational or professional organizations does the man or chief breadwinner in the household belong to?

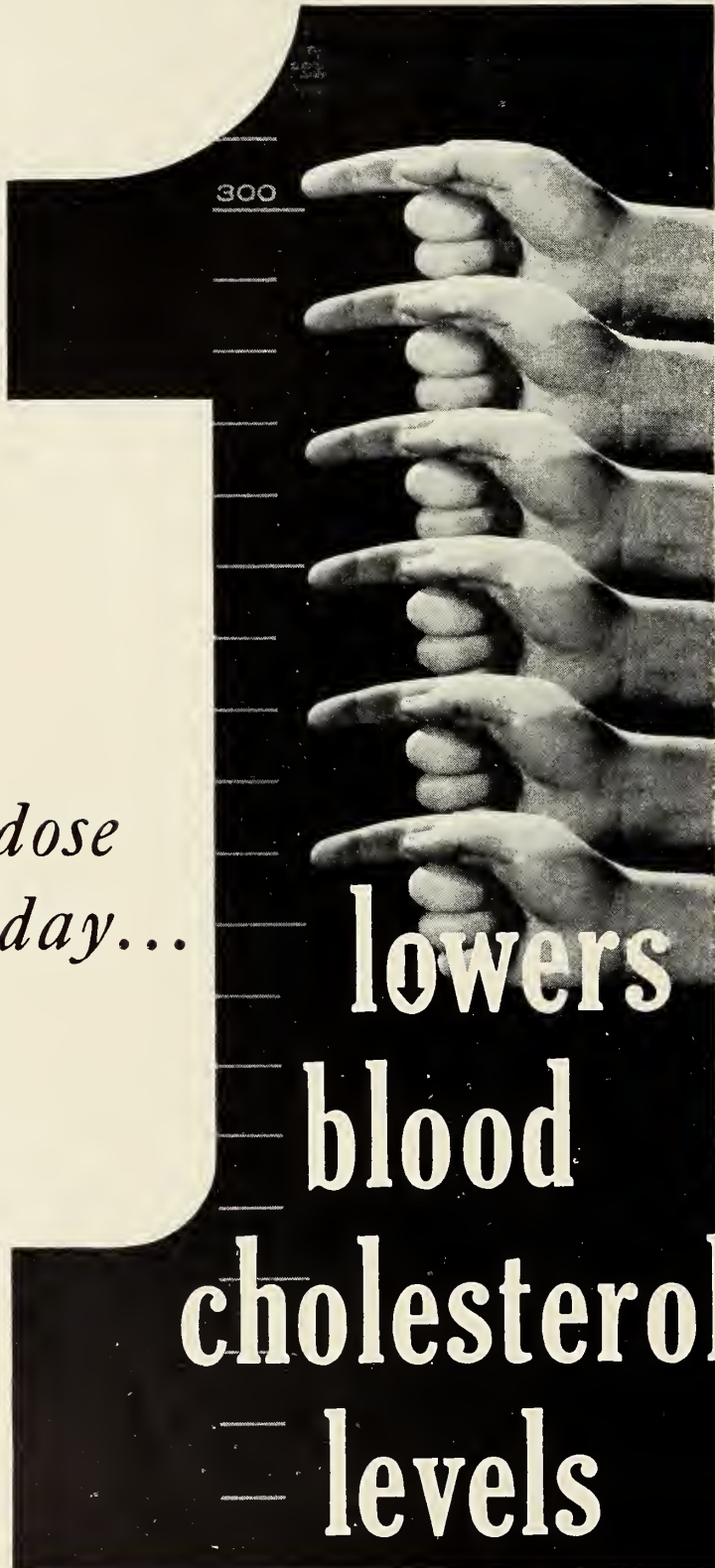
Farm:	Labor Union:
Farm Bureau	<input type="checkbox"/> 1 CIO <input type="checkbox"/> 4
Farmers Union	<input type="checkbox"/> 2 AF of L <input type="checkbox"/> 5
Grange	<input type="checkbox"/> 3 Other <input type="checkbox"/> 6
Professional and Business:	
Dental-Medical	<input type="checkbox"/> 7 31
Legal	<input type="checkbox"/> 8
Business Associate	<input type="checkbox"/> 9

Name (OPTIONAL)

Address (OPTIONAL)

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Editorial Opinion

WILL PRIVATE PRACTICE CEASE TO EXIST?

Think of the peculiar changes which happened in the private practice of medicine. We are observing the terrific trend for industry, labor, government, insurance companies, hospitals and related groups to control all health activities. Does this mean that private practice will cease to exist? I ask the question, because I think we have something here to think about. Yes, there is imminent danger of the private practice of medicine losing its status as a professional art and being forced into the mold of a trade.

Various industries over this country are building hospitals and organizing medical service plans for employes and dependents which are staffed by salaried and closed panel physicians.

Labor also is establishing hospitals and complete medical service plans, staffed by salaried and closed panel physicians to care for their members and their dependents. Dr. Edwin F. Bailey, Vice-President of the Health Insurance Plan of Greater New York (HIP), has predicted that organized labor will soon establish the pattern of medical care in the United States.

As all of you know the Veteran's Administration is providing hospital care and medical service for an ever-increasing number of nonservice connected disabilities. It is possible that in the not too far distant future dependents of veterans will be included.

Take a look at Social Security and its medical provisions. Most physicians do not realize what is happening to them in the Social Security legislation. The disability program in any form means to me the ultimate nationalization of medicine and the end of private health and accident insurance. These changes will not take place over night, to be sure, but they will gradually take place as each new Congress that meets will be urged to broaden more and more the coverage. When physicians are brought under government control for a permanent and total disability program, even if only for medical certification, the next moves will urge more for cash benefits for temporary illness, followed by medical care for short-term sickness. And there you go with the final step as national compulsory federal health insurance.

Attention should be given to the Hill-Burton money and some of our experiences in Arkansas with it. We have accepted federal money in Arkansas—Hill-Burton money—for one-time grants for bricks and mortar to build hospitals. What has happened recently? In three instances now certain doctors were denied staff memberships for good reasons it was thought in three different

hospitals. These doctors have gone to court, have won their cases and forced themselves on to the hospital staffs. I ask you to remember the statement of Supreme Court Justice Robert H. Jackson in 1942 "it is hardly lack of due process for the government to regulate that which it subsidizes." The cases I am referring to have been carried to their limit in court I might tell you. The Supreme Court indicates that a hospital built with a portion of tax funds is subject to different legal principles than a private hospital; that in such a hospital a doctor as a citizen if he has a legal license to practice medicine cannot be denied the use of the particular hospital and that the staff rules and regulations of such a hospital are subject to court supervision. This is what you are confronted with when you accept public funds—tax money—for bricks and mortar.—*Guest Editorial by R. B. Robins, M.D., in The Journal of the Arkansas Medical Society, June, 1957.*

SHALL WE ABANDON BLUE SHIELD?

One hears, too often, the expressed opinion that Blue Shield has served its purpose, and that we should now turn the job over to commercial insurance carriers. This, they say, would get us out of the insurance business and leave us with the assurance that the people can have protection from other sources. Those who espouse this idea must believe that the social-economic-political problems that fathered the conception of the prepaid medical care have been solved or have ceased to exist.

It should be obvious that the social need for prepaid medical care is still with us. No matter how cheap the dollar nor how many cheap dollars pass through the hands of each of us, relative values remain unchanged. There is, and there always will be, a large segment of our population to which the advent of a medical catastrophe remains catastrophic. Those making up this large group are good people. They deserve the best available medical care. They cannot buy it individually, but, collectively it can be available to them at a price they can afford to pay.

This same group constituted the foundation upon which the socialistically minded people in our government rested their demand for universal, compulsory, government-controlled health insurance (state medicine to us). Their needs formed the basis of arguments for the often repeated "Murray-Dingle" bills. Blue Shield and Blue Cross constituted the fundamental positive answers by the medical profession—answers that led to the

(Continued on Page 968)



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SHALL WE ABANDON BLUE SHIELD?

(Continued from Page 966)

defeat of these bold attempts at socialization of medicine. The defeat of successive bills lulled some of us into a tranquil state of mind. It did not, however, discourage the socialist group that has been and still is so strong and so well entrenched in the social-security wing of H.E.W. This group has simply adopted a more suave and less bold method of approach. What is more important, they are succeeding. It will be surprising if any Congress comes and goes without taking a nibble from the freedom of medical practice. The doubter needs only to remember H.R. 7225 and watch for similar chiseling on our liberty.

It is our desire to furnish to the people who need it the quality and quantity of medical care to which any American may aspire, at a price within their means. We must do this under policies formulated and approved by doctors of medicine and with no governmental interference. We are in the insurance business at no profit as measured in dollars and cents. Our recompense is the accomplishment of the aim stated above as free physicians and with no third-party interference.

Would the commercial insurance people have the same goals and accomplish the same ends in similar manner? They would not. Certainly, we are glad to have commercial insurance companies in the field of health insurance. These companies will help attain the goal of supplying health insurance to the vast majority of our populace. If the commercial companies did not have the thorn in the side—the competition of a vast nonprofit Blue Shield that has now supplied protection to many, many millions of people, the whole effort would sink to the level of business for profit only. It could not be expected that these insurance companies would maintain an altruistic approach, would worry much about doctor-patient relationship, nor exert themselves unduly to avoid socialization of the practice of medicine.

The social-medical-political problem involved in health insurance as looked at from our viewpoint, is a continuing problem. It must have a continuing answer. The most effective tool, thus far, has been Blue Shield-Blue Cross. We must not abandon this effective tool unless we are ready to capitulate.—Editorial, *Nebraska State Medical Journal*, May, 1957.

OUTCOME OF IOWA LITIGATION

On April 3, 1957, the State Legislature of Iowa enacted a new law pertaining to the practice of pathology and radiology in the hospitals of that state. The important features of the act are as follows:

The ownership, maintenance and operation of the laboratory and X-ray facilities are proper functions of a hospital.

Pathology and radiology services performed in hospitals are the product of the joint contribution of hospitals, physicians and technicians but these services constitute medical services which must be performed by or under the direction and supervision of a physician, and no hospital shall have the right, directly or indirectly, to direct, control or interfere with the professional medical acts and duties of the physician in charge of the pathology or radiology facilities or of the technicians under his supervision.

Unless the department is leased, or unless the hospital and physician mutually agree otherwise, technicians and other personnel, not including physicians, shall be employees of the hospital, subject to the rules and regulations of the hospital applicable to employees generally, but under the direction and supervision of the physician in charge of the department.

The contract between the hospital and physician in charge of the laboratory or X-ray facilities may contain any provision for compensation of each upon which they mutually agree, provided however that no contract shall be entered into which in any way creates the relationship of employer and employee between the hospital and the physician. A percentage arrangement (for compensating the hospital) is not to be construed to be unprofessional conduct on the part of the physician or in violation of the statutes (of Iowa) upon the part of the hospital.

The hospital admission agreement signed by the patient or his legal representative shall contain the following statement:

"Pathology and radiology services are medical services performed or supervised by physicians, and the personnel and facilities are or may be furnished by the hospital for said services. Charges for such services are or may be collected, however, by the hospital on behalf of said physicians pursuant to an agreement between said physicians and the hospital, and from said charges I consent that an agreed sum will be retained by the hospital in accordance with an existing agreement between the physician and the hospital."

The hospital bill shall properly include the charges for pathology and radiology services as long as the name of the physician is stated and it fairly appears that the charge is for medical services. The said hospital bill shall also contain a statement substantially in the following form:

"The pathology and radiology charges are for medical services rendered by or under the direction of the physician listed above and are collected by the hospital on behalf of the physician, from which charges an agreed sum will be retained by the hospital in accordance with an existing agreement to which retention you consented at the time of your admission to the hospital."

Fees for radiology and pathology services must be paid for as medical and not hospital services. In all cases where payment is to be made by a corporation (insurance), payment for radiology and pathology services shall be made by a medical service corporation and not by a hospital service corporation.

This legislation should terminate an unpleasant controversy which began in 1952 over the extension of Blue Shield benefits to include the services of pathologists, radiologists and anesthesiologists. A thirteen-week trial in district court in which thirty-four Iowa hospitals were plaintiffs and the Iowa State Medical Society defendant ended with the verdict (in part) that (a) pathology and radi-

(Continued on Page 1073)

The JOURNAL

of the Michigan State Medical Society

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VOLUME 56

AUGUST, 1957

NUMBER 8

Upper Peninsula Medical Society



D. P. HORNBOKEN, M.D.
President-Elect

The Upper Peninsula Medical Society was organized in Marquette, Michigan, in the old Superior Hotel in the year 1896 by a group of Marquette physicians. Its function was to be both educational and social and to serve as the medium for acquainting the doctors of northern Michigan with one another.

The first annual meeting was held in 1897, and a meeting has been held every year since. The society is unique in that it has

endured for sixty-one years without constitution or by-laws. The meetings are rotated between Iron Mountain, Escanaba, Menominee, Houghton, Sault Ste. Marie, Marquette, and Ironwood, with the county societies in the area acting as hosts. The only elected officer is the president-elect, the other officers being of the county society which is acting as host.

Originally the meetings were held during the month of August but a few years ago the time was moved up to June so it would not be competitive with the meeting of the state society.

That it has fulfilled its original purpose is evident by the large attendance each year.

Sixty-Fourth Annual Session

The sixty-fourth annual session was held at Houghton, Michigan, June 21-22, 1957, with T. P. Wickliffe, M.D., Calumet, president; D. P. Hornbogen, M.D., Marquette, president-elect; and F. W. Lawson, M.D., Houghton, secretary.

Elaborate arrangements were made for entertainment, exhibits, and meetings, with an outstanding scientific program. A dinner was held at the Douglass House on Friday evening, and on Saturday evening, cocktails, a reception, dinner and dance were held at the Onigaming Yacht Club. L. E. Irvine, M.D., Iron Mountain, was made President-elect for 1958.

The scientific program for Friday, June 21, was: "Welcome"

T. P. Wickliffe, M.D., President, Upper Peninsula Medical Society

Moderator: Simon Levin, M.D.

"Application of Smear Technique in the Diagnosis of Cancer"

R. J. Rodgers, M.D., Director, Upper Peninsula Cytology Laboratory, Menominee, Michigan

"Regional Enteritis"

Arnold Jackson, M.D., Department of Surgery, Jackson Clinic, Madison, Wisconsin

(Dr. Jackson was unable to attend at the last minute, owing to the sudden illness of his son, but Grover Penberthy, M.D., of Detroit, who was on the program and who is a native of this north country graciously substituted for him and gave a masterful talk on Dr. Jackson's subject.)

"Diagnosis and Treatment of Acute Coronary Disease"

Francis Murphy, M.D., Chief, Department of Medicine, Marquette University, Milwaukee, Wisconsin.

(This essayist has been Professor of Surgery at Mar-

quette for thirty years. A friend recently gave \$350,000 to the University to establish a Murphy Chair of Surgery, to be a full-time professorship at a generous salary, but, since Dr. Murphy doesn't wish to devote full time to teaching now, he will later designate his successor, when another gift will follow and the chair made permanent.)

"Present Day Trends in Infant Feeding"

Moses Cooperstock, M.D., Pediatrics, Marquette, Michigan

"Treatment of Burns"

Grover C. Penberthy, M.D., Surgery, Detroit, Michigan (Since Dr. Penberthy had substituted for Dr. Jackson, he called upon Dr. N. S. Gumbel, of Wayne University, Detroit, to give the talk on burns.)

Moderator: A. M. Roche, M.D.

"Mediastinal Tumors"

Joseph Gale, M.D., Department of Surgery, University of Wisconsin Hospital, Madison, Wisconsin

"General Principles in the Management of Fractures"

Harrison McLaughlin, M.D., Clinical Professor, Orthopedic Surgery, Columbia University, New York City

"Present Ideas of Treatment of Varicose Veins and Ulcers"

Carl Moyer, M.D., Department of Surgery, Washington University School of Medicine, St. Louis, Missouri

Moderator: Percy Murphy, M.D.

"Constitutional Disease"

Harold Falls, M.D., Professor of Ophthalmic Surgery, University of Michigan Hospital, Ann Arbor, Michigan

"The Fractured Wrist"

G. J. Curry, M.D., Orthopedic Surgery, Flint, Michigan

"Some Recent Studies on the Abnormalities of Pigmentation"

A. C. Curtis, M.D., Professor and Chairman, Department of Dermatology, University of Michigan Hospital, Ann Arbor, Michigan

Addresses by F. Foster, M.D., Secretary, Michigan State Medical Society, and Tom Paton, Michigan Medical Service Representative

Women's Auxiliary Activities.—Women's Auxiliary activities at this meeting were as follows:

Friday, June 21

Registration and Continental Breakfast in the Hospitality Room

District Auxiliary Luncheon and Meeting: 12:30 at Douglass House

Mrs. J. J. Burke, District Director, Chairman

Guest Speaker: Mrs. A. C. Stander, President Women's Auxiliary to MSMS

Cocktails and Dinner: 6:00 P.M. at Douglass House

Public Address: 8:30 P.M. at Houghton High School Arch Walls, M.D., President Michigan State Medical Society

Saturday, June 22

Registration: 10:00 to 11:00 A.M.

Dutch Lunch at Onigaming Yacht Club 12:00 to 1:00

Afternoon: Swimming, boating at Onigaming. Golf at Portage Lake Golf Club

Cocktails: 6:00 P.M. at Onigaming
Courtesy Michigan Medical Service. Followed by Dinner and Dance

Upper Peninsula Medical Assistants Society.—

The medical assistants society held its first annual meeting in conjunction with the sixty-fourth annual session of the Upper Peninsula Medical Society. Their program was as follows:

Thursday, June 20

Cocktails and Buffet, Onigaming Yacht Club

Friday, June 21

Registration, Douglass House

Luncheon with Medical Auxiliary, Douglass House

Guest Speaker: Mrs. A. C. Stander, President of Michigan State Medical Society Auxiliary

Hostess: Anna Warner

Tour, Michigan Department of Health Laboratory, Michigan College of Mining and Technology Campus

Host: Mr. Alden Scott, Director

Tea, Union Building, Tech Campus

View of Exhibits, Union Building

Executive Board Meeting, President's Suite, Douglass House

History of the Houghton County Medical Society

Simon Levin, M.D.
Houghton, Michigan

THE Houghton County Medical Society was organized in the late 1890's and affiliated with Michigan State Medical Society which granted the Houghton Society a charter on September 20, 1902. Since then, the Society has become an integral portion of the State Medical Society, and has become quite active. The application for charter was signed by Drs. A. F. Laubaugh and W. K. West, and was countersigned by Councilor T. A. Felch of Ishpeming.

In about the last fifteen years Houghton has joined with Baraga and Keweenaw Counties to carry out monthly meetings and health department work, making it more efficient for the neighboring counties with smaller groups.

At the beginning, the society had a membership of forty-eight, but industrial conditions changed, and there now are only twenty-five members. One half of the practicing physicians were hired by the copper mining companies. They were so-called "company doctors," who were on stipulated salaries with privilege of outside practice as well. All were general practitioners doing all types of practice, making calls with horse-drawn vehicles in winter and summer, doing obstetrics in houses, and having facilities of modern sized hospitals equipped with x-rays, laboratories and surgical facilities. The large companies, like the Calumet and Hecla Mining Company, and the Copper Range Mining Company, had their own hospitals, but the smaller companies had the use of small community hospitals. As the industrial mining decreased within the county, the mining company hospitals closed, and now we have two very well-equipped and accredited hospitals in the county—St. Joseph's Medical Center at Hancock, Michigan, the Memorial Hospital at Laurium, Michigan, and the Memorial Hospital at L'Anse, Michigan, where excellent work in medical, surgical, x-ray and laboratory work can be carried out. The medical center at Hancock (St. Joseph's Hospital) has a full-time pathologist and radiologist connected with its service. These specialists are available to the surrounding hospitals, which have

no such personnel, making for more thorough early scientific diagnostic conclusions. The ensuing of thorough treatment thus gives more satisfactory results.

A very interesting feature of the change of time and condition is shown in Medical Society dues. In 1902, the annual dues were \$7.50, in 1921. \$10.00, in 1925 \$15.00, in 1938 \$17.00, in 1945 \$32.00, in 1946 \$42.00. Now dues are \$85.00 per year, including the extra dues paid to the American Medical Association.

We have had, and have today, many medical men who advanced in the stride of the development of scientific medicine and surgery. It is my pleasure and privilege to have known these men personally, as I commenced my medical practice in the very beginning of this century.

The cry of today is, "Do things in a modern way, and keep pace with the advancement." In a community like ours, situated far from the large centers of learning, it is with assurance that we remain in the ranks, keeping pace with modern advancing medicine. Therefore, we have a feeling of satisfaction in our work and a keen desire to assist in advancing the standards, which keep us on our toes in this changing medical development of our time. This we must do in fairness to the people whose medical care is intrusted to us. To violate this trust in any way, or to commercialize it, would contribute to a distinct lessening of the standards and quality of medical practice, which should be our highest and strongest call to service. Permit me here to emphasize that service, which must be scientific, and always accurate, gracious and kindly, thorough and fair, and must stand out as our guiding star in the advancement of our wonderful profession.

We have had the pleasure and honor of acting as hosts to the Upper Peninsula Medical Society members in the Copper Country on three or four occasions since our induction. This year brings to us another meeting, and from the excellency of the papers by noted men of authority in their

(Continued on Page 1008)

Diagnosis and Treatment of Acute Coronary Disease

Francis D. Murphy, B.S., M.D., M.S. (Med.) F.C.A.P.

Milwaukee, Wisconsin

FOR the past thirty-five years there has been a progressively increasing interest in diseases of the coronary arteries. The emphasis and interest in coronary disease are not due to any significant discovery, such as insulin in the treatment of diabetes or the antibiotics in infections, but the increasing number of cases of coronary disease among the middle and older classes of patients augments its importance. It must be kept in mind, however, that thirty-five years ago much less was known of coronary artery disease than now. Surely, the diagnosis of angina pectoris was familiar, but coronary thrombosis had just begun to be recognized by the profession. In those days the diagnoses of acute myocarditis, acute myocardial insufficiency, and even acute indigestion, were usually made. Of course, the introduction into practical work of the electrocardiograph helped in the recognition of certain kinds of coronary disease and was a significant factor in our present-day concept of coronary disease.

Heart disease is the leading cause of death in the United States, and, in this category, coronary disease of the heart accounts for the majority of cases. Formerly, it was common practice to differentiate angina pectoris from coronary thrombosis, but today the differentiation must go much further, and it is these various types of diseases of the coronary arteries that shall be discussed.

Classification

Before one can make a diagnosis of coronary artery disease, an adequate classification of the disease must be kept in mind. Although volumes

have been written upon this subject and many classifications have been advanced, the simplest approach to the problem would be to consider four stages of coronary disease.

Stage 1.—In this stage there is a beginning loss of elasticity and resiliency of the coronary arteries. It is the stage when very little change may be seen in the artery, and tests, as electrocardiographic tracings, reveal nothing. It is the stage of angina pectoris provoked by exercise or by a great emotional strain and to which the term angina pectoris of effort is applied.

Stage 2.—The arteriosclerotic changes somewhere in the coronary system have become more pronounced, the narrowing is greater, elasticity and resiliency have become less, and there may be some electrocardiographic changes in a few of these patients. The angina pectoris occurs on slight provocation, and frequently the attacks of pain in the chest occur while the patient is sitting in a chair or lying in bed. This stage is called angina pectoris decubitus.

Stage 3.—The arteriosclerosis has become more marked, but as yet no complete occlusion has occurred. In certain cases, however, the ischemia becomes so great that small areas of infarction on the endocardial surface of the heart develop, and this has been called acute coronary insufficiency (Master).

Stage 4.—The coronary artery in this stage is plugged with a thrombus and the classic picture of acute coronary thrombosis (occlusion) occurs. As a result of this, an infarct develops which extends from the endocardium through the heart wall to the pericardium. This is called a through-and-through infarction and is the real old-fashioned coronary thrombosis. This is the most serious event that takes place in heart disease and one that causes death in about half of the patients

Dr. Murphy is professor and director, Department of Medicine, Marquette University School of Medicine, and Medical Director, Milwaukee County Hospital, Milwaukee, Wisconsin.

Presented at the sixty-fourth annual session of the Upper Peninsula Medical Society, Houghton, Michigan, June 21, 1958.

within the first week. It is in this stage that a physician's entire skill and experience are called upon for the most vigorous kind of treatment if the patient's life is to be saved.

This kind of classification can easily be subjected to criticism, but it illustrates what is seen in practice and may be helpful in management.

Diagnosis and Treatment

As pain in the chest is the most common and significant symptom of coronary disease of the heart, it requires careful consideration. A complete history is the most important part of the examination. The diagnosis of coronary disease in the earlier Stages one and two, that is, angina pectoris of exercise and angina pectoris decubitus, is made almost entirely upon a careful, detailed history. These painful episodes may be simulated by other disorders which may be placed under the letters spelling out P-A-N-G, in the following manner:

P	(Pericarditis (Pleurisy (Primary carcinoma of the lung (Pneumonia
A	(Aortitis (Arthritis (Aneurysm
N	(Neuritis (herpes zoster) (Neuralgia (intercostal) (Nervous tension or anxiety syndrome
G	(Gallstone disease (Gastric ulcer (consider also cardiospasm and hiatus hernia)

Angina pectoris is not just any kind of a pain in the chest. It has distinctive features. The pain originates, as a rule, under the upper part of the sternum. It may radiate down the left arm or the right arm, up into the neck or in all three places. The pain is difficult for many patients to describe, but is not a stabbing, throbbing, nor cutting type of pain. It is usually more of a constricting kind that causes the patient to be almost breathless for the time being. It is a type of pain which the patient feels he would be unable to tolerate for a very long period of time; but, fortunately, the pain lasts not more than five minutes to ten minutes and recedes, as a rule, automatically. Furthermore, it is relieved immediately by nitroglycerine. When the pain disappears, the patient feels about as well as he did before the anginal attack occurred. Another feature

is that the pain in angina pectoris in the early stage occurs after exercise or after an emotional strain. Months may elapse between the first attack of angina pectoris and subsequent episodes.

Anginal pain sets in suddenly, after exercise or emotional strain; it is vague in type and short in duration. A pain which has been coming on for several hours is not anginal.

The prognosis of angina is usually good, but, of course, it may develop progressively into a more serious coronary insufficiency and end with coronary thrombosis. It should be emphasized, however, that it is a mistake to treat angina pectoris too severely and to modify the life of the patient too greatly, as the patient may develop an apprehensiveness and fear of death which is not justifiable.

A simple modification of the patient's occupation, such as giving up two jobs and taking care of one, an adjustment of the patient's habits, such as excessive smoking or drinking, and, particularly, the giving up of coffee either entirely or almost entirely may be beneficial for patients with the anginal syndrome. Such drugs as peritrate, nitroglyn, aminophylline, or some of the other vasodilators are frequently of great help. If overweight prevails, reduction of weight is always advised.

In angina pectoris decubitus, that is Stage two, conditions change a little. Exercise no longer is necessary to precipitate pain, but the angina may occur at rest or lying down, and frequently in this stage slight exertion, as walking a block, may precipitate the attack of angina pectoris. Sweating, dizziness, and dyspnea are not features of these early stages of coronary disease. The pain of angina pectoris decubitus is frequently brought about by lying down, but this is not always true. It may come on spontaneously when the patient is sitting up. The prognosis, in this condition usually becomes worse.

Angina pectoris decubitus is treated quite like angina of exercise, but more consideration must be given to this disorder. The pains are more frequent and the outlook is more serious than in angina pectoris of exercise. Angina pectoris decubitus, for example, may require that the patient give up his occupation, at least for a while, and control the painful symptoms as best possible.

Within recent times the question of the use of a diet in the treatment of angina or early coronary disease to control the atherosclerosis of the coro-

naries has attracted more than ordinary attention. In the diet the control of cholesterol is considered to be a valuable procedure. Without going into this phase deeply, the following ideas may be briefly epitomized.

1. There is no unanimity of opinion as to how much value low cholesterol diet has in the treatment of any coronary condition.

2. The relationship between the cholesterol in the diet, the blood cholesterol, and the atherosclerosis of the coronary system has not been completely formulated (Page).

3. The blood cholesterol on practically every patient should be determined with any type of coronary disease. If the blood cholesterol is high, for example, 300 or above, he should be on a low fat, low cholesterol, diet in an effort to control the hypercholesterolemia.

4. There is little doubt that hypercholesterolemia has a relationship to the atherosclerosis of the coronary system, but how much of a factor it is and what the other factors are has not been explored completely.

5. Unless there is a positive hypercholesterolemia, it is not considered justifiable to modify a patient's diet or his life to try to obtain a result which may not be obtainable or even desirable.

In stage three, the term acute coronary insufficiency has been used to designate this type of episode. As stated before, in these cases the coronary artery is not entirely plugged, but the circulation has been diminished to a point where small areas of infarction develop, especially in the endocardial area. How, then, does this differ from angina pectoris described above? One used to have considerable difficulty trying to make a proper diagnosis when a patient had an anginal type of pain which lasted two or three hours or more instead of for five to fifteen minutes and who later failed to have the accustomed picture of coronary thrombosis. Masters seems to have solved the problem quite satisfactorily when he introduced the term "acute coronary insufficiency" to designate these minor types of infarction, differentiating them from acute coronary thrombosis. In such cases, the pain starts as angina pectoris but continues for a number of hours. The patients in this category do not suffer the shock and collapse that is so common in acute coronary thrombosis. The pain subsides and the patient feels fairly comfortable. The electrocardiogram usually reveals distinctive changes, but not those of a genuine myocardial infarction. The main thing is that the prognosis is entirely different than in an acute coronary thrombosis, in that most patients with acute insufficiency usually recover and

the length of time required for treatment is a matter of two weeks or three compared with six to eight weeks or longer in the other type.

While the term "acute coronary insufficiency" is not the most desirable designation for group 3, it has become fairly well established in the literature and its features have been well delineated. The concept of "acute coronary insufficiency" as distinct from coronary thrombosis is not entirely new, as it first appeared in German literature in the early 1930's. The belief is that the incidence of this acute coronary insufficiency is much greater than that of coronary thrombosis, but since the attack of acute coronary insufficiency is rarely fatal, postmortem studies have been meager. Masters thinks that while there are an estimated one million attacks of coronary thrombosis annually in the United States, probably one and one-half to two million attacks of acute coronary insufficiency occur each year. However, acute coronary insufficiency must not be taken too lightly, as it does represent a type of attack of coronary disease which may terminate fatally. It is a stage of coronary insufficiency which is more severe and serious than angina pectoris on one side and less serious and severe than coronary thrombosis on the other. The treatment naturally differs from acute coronary thrombosis in the following ways: (1) Shock is not present; (2) the patient may be out of bed sitting in a chair after one week; (3) the home treatment may be for a period of one to two weeks; and (4) anticoagulants in treatment are not necessary. Most patients make complete recovery within a period of several weeks and may resume their occupation.

Stage four, the stage of the acute coronary thrombosis with a myocardial infarction, which extends through the wall from the endocardium to the pericardium, usually is ushered in dramatically by pain in the chest, shock, sweating, vomiting and collapse. The diagnosis is not usually difficult, provided the history reveals previous bouts of chest pain. However, in the absence of a careful history, such things as acute abdominal emergencies, perforation of a peptic ulcer, gallstone colic, mesenteric thrombosis, hemorrhagic pancreatitis, dissecting aneurysm or acute bowel obstruction may have to be considered carefully. Failure to operate upon some of these acute abdominal emergencies spells death for the patient, while, on the other hand, an operation on a pa-

tient with acute coronary disease carries the same disastrous prognosis.

The chart below may help to differentiate the acute coronary disease from abdominal catastrophies.

Coronary	Abdominal Disease
1. Pain seldom localized in abdomen. Usually well above nipple line.	1. Pain localized in abdomen.
2. Abdomen may be distended.	2. Abdominal wall rigid.
3. Patient not content to lie flat on back.	3. Patient lies flat and remains as quiet as possible.
4. Neck veins full and distended.	4. Patient pale, pasty and appears bloodless.
5. Cyanosis, dyspnea, and cough significant.	5. Cyanosis, dyspnea and cough absent.
6. Electrocardiogram helpful.	6. X-ray reveals free air in abdomen in case of perforation of an organ.

Pulmonary embolism may develop and it sometimes causes great confusion with the coronary artery disease. Further, coronary artery disease and pulmonary embolism may occur almost coincidentally. The shock and collapse in acute coronary thrombosis is rather characteristic, and the fall of blood pressure is not merely a drop of 15 to 20 millimeters of mercury but it is extensive, let us say from 150 to 80, associated with the shock syndrome.

The usual method of management of the patient with acute coronary thrombosis (myocardial infarction) is set in a fairly rigid pattern. For example, shock must be combated, the pain controlled, and the arrhythmias, or heart failure, which may accompany the attack, must be treated carefully.

The usual, almost automatic, routine for the treatment of this condition will be discussed briefly; first, the controversial aspects of treatment which have developed within recent times will be considered.

Shock requires attention first. Vasopressor drugs, particularly norepinephrine (Levophed) in doses of 5 mgm. per liter of five per cent glucose in water may be given two or three times a day, if necessary. However, if heart failure is imminent, the amount of intravenous fluid must be controlled more cautiously. Therefore, Wyamine may be given intramuscularly, or intravenously without the large quantity of fluid. The use of blood trans-

fusions is not as popular today as it was formerly, since they have not proved to be very effective in the treatment of the shock of coronary thrombosis.

The pain of coronary thrombosis is seldom of such intensity that drastic measures are necessary. Relief of pain may be obtained best by moderate doses of Pantopon or Demerol rather than morphine. Morphine more frequently causes nausea, vomiting and respiratory depression. However, in some rare cases, one must resort to morphine. If the pain tends to be prolonged over an hour or two, the use of 100 milligrams of heparin intramuscularly repeated every few hours is often effective. Although nitroglycerine under the tongue is usually of no help in the case of acute coronary thrombosis, nitroglyn may prove of value two or three times a day.

Oxygen is given automatically and routinely in all patients with acute coronary attacks, and the patient's chest is elevated to dispel dyspnea and orthopnea. Since acute pulmonary edema of left ventricular failure may occur, this constitutes an important complication. The dyspnea, the frothy sputum and the bubbling rales in the chest are the chief features. When this occurs, it is best to have the patient sit in a chair rather than lying in bed. Pantopon or morphine may save the situation. However, Demerol may even be better. Rapid digitalization is necessary, and the best way to proceed is to give immediately .45 milligrams of Cedilanid or Digoxin intravenously, repeated three or four times a day as needed. Aminophylline in doses of 7½ grains in 20 cc. of 5 or 10 per cent glucose may be given intravenously slowly, and then 2 cc. of a mercurial diuretic given intramuscularly will act as an adjunct agent in the treatment.

During an attack of acute coronary thrombosis, paroxysmal ventricular tachycardia may constitute a major threat to the patient. The chief treatment consists of giving quinidine or Pronestyl orally, repeated every few hours until the arrhythmia is controlled. Pronestyl may be given intravenously in serious cases. Ordinarily, the total dose should not exceed one gram. It must be pointed out, too, that if an A-V block or a dissociation occurs, these constitute a contraindication for quinidine or Pronestyl. At times, auricular flutter or fibrillation sets in suddenly. In this case, the oral or intravenous administration of Digoxin or digitoxin may be given and repeated until the arrhythmia is

controlled. Quinidine may then be used to convert the flutter of fibrillation into sinus rhythm.

Controversial Issues in Treatment

Within recent years there has been no unanimity of opinion regarding the use of the following in coronary disease: (a) Anticoagulants, (b) the armchair method of treatment, and (c) blood transfusions in the treatment of shock.

It is becoming clearer that most, but not all, patients with coronary occlusion should receive the necessary anticoagulant treatment. As pointed out by Wright, there are over one million coronary occlusions in this country in a year and the death rate is 20 per cent. He and his followers believe that anticoagulant treatment should be started in every case where a diagnosis of coronary occlusion is made. Russek, on the other hand, has been an exponent of the idea that one can divide patients with acute coronary occlusions into good and bad risks. He believes that in good risks, anticoagulants, such as Dicumarol, may be more detrimental than beneficial; he agrees that in the bad risks anticoagulants are indicated. All agree that anticoagulant treatment (Dicumarol) is contraindicated in case of liver damage, especially from congestion, hepatitis with jaundice, ulcers, particularly gastrointestinal ulcers or ulcers which hemorrhage from any place, or in any case where there is a hemorrhage in the body, especially in acute cerebral hemorrhage.

Experience with the anticoagulant drugs emphasized the need for very careful prothrombin studies, as the giving of anticoagulants in the absence of these studies is a dangerous procedure. Naturally low prothrombin time has occurred in congestion of the liver, nephritis, especially the hemorrhagic type, ulcers, and so forth. Within the past four or five years the almost routine use of anticoagulants has predominated in the management of patients with coronary occlusion.

The early ambulation of the patient with coronary occlusion is nothing new. Years ago, all patients were treated after a rest of three or four days, and the results were not very good. It has become almost automatic to keep the patient with acute coronary occlusion or thrombosis in bed at least six weeks. This procedure has become somewhat modified lately and now it is more common to individualize the patients. Some may require a long period of bed rest and others about half as much. Levine has been the sponsor to a large

extent of the armchair method of treatment. In the chair position, the legs are in a dependent position. The venous return to the heart is reduced as well as the load on the left ventricle. This eventuates in a reduced load on the heart, but it increases the cardiac output. From a personal standpoint, I prefer to keep the patient in bed for at least a few weeks, unless heart failure develops, when chair treatment is certainly advantageous.

The use of a transfusion when there has been blood loss or following an operation has advantages that are not exhibited nor to be expected in the shock of coronary thrombosis. There is danger in the use of a transfusion in coronary thrombosis, giving rise not only to a fear of overburdening an already harassed heart, but also to the fear of a renal shutdown. Intra-arterial transfusions have proved unsatisfactory. Although a transfusion may be beneficial in a few cases, there is very little significant benefit observed in those given a transfusion over those who had none. Personally, I prefer not to use them.

Summary

Coronary disease has been considered in four stages in which the disease may progress, from Stage one to Stage four. In Stage one, which is Heberden's angina pectoris, only palliative treatment is required. Stage two, the angina decubitus, may indicate that an acute coronary thrombosis is imminent. Stage three occupies a position between angina pectoris and coronary thrombosis. This stage, known as acute coronary insufficiency, has a characteristic clinical picture, a clear-cut type of prognosis, and a fairly definite type of pathologic change in the coronary system and the heart itself. The treatment and prognosis are quite different from either angina or a coronary thrombosis. In Stage four, coronary thrombosis, the diagnosis is usually made without any great difficulty. The prognosis in these cases, in distinction from Stages one, two and three, is bad. The treatment of acute coronary thrombosis is associated, in the hands of the most skillful, with a mortality rate of from twenty per cent to twenty-five per cent during the acute attack. In treating acute coronary thrombosis, the automatic routines practiced by nearly everyone have been reviewed, and the controversial aspects of the use of anticoagulants, blood transfusions and the period of bed rest necessary have been discussed briefly.

Upper Peninsula Medical Society

Annual Meeting, June 21-22, 1957

Abstracts of Papers Presented

REGIONAL ENTERITIS

By ARNOLD S. JACKSON, M.D.

Milwaukee, Wisconsin

Since President Eisenhower's illness and surgery, interest in regional enteritis has been reawakened and the controversy regarding its proper treatment has increased.

The writer feels that the term regional enteritis is preferable to terminal ileitis, since the disease may occur in any part of the small or large intestine. In 1937, a report of four cases, one of which occurred in the jejunum, was reported and the disease designated as regional enteritis. The etiology of this condition is unknown, and opinion differs as to whether resection or a short-circuiting operation is preferable. Many cases go unrecognized for a long time, and frequently the patient is subjected to an unnecessary appendectomy.

The important signs and symptoms of the disease are reviewed, together with the roentgenologic findings, and its surgical treatment is considered. Brief abstracts of the author's case histories are presented and conclusions presented.

THE FRACTURED WRIST

By G. J. CURRY, M.D.

Flint, Michigan

The upper extremity is just as good as the hand on its distal end. A functioning hand is dependent upon a functioning wrist joint. Wrist fractures that heal well in a satisfactory position, but with stiff fingers are bad results. Those that heal with a residual deformity but with good neighboring wrist joint function may be classified as good results. A compromise is apparent. A functioning, useful hand, at the expense of a deformity following reduction and healing, is more acceptable than the reverse.

This presentation will be a discussion of fractures involving the distal radius and ulna. Diagnosis, management and objectives will be emphasized according to generally accepted principles in fracture care.

The fractured wrist represents an injury to a person, specifically involving a part. The regime of management must be planned with the constant philosophy of functional restoration to the neighboring joints and should embody some type of ade-

quate fixation that will permit a mobility potential.

PRESENT TRENDS IN INFANT FEEDING

By M. COOPERSTOCK, M.D.

Marquette, Michigan

The past several decades have witnessed radical changes in the nourishment of infants. The simplification of artificial feeding, together with the modern tempo of living, have greatly influenced the trend away from breast feeding, despite its recognized advantages and the well-known fact that the majority of women are potentially able to nurse their babies successfully in the early months of life.

The so-called self-demand method of infant feeding presently in vogue represents a radical departure from the rigid techniques of the recent past. This swing to a permissive attitude in infant feeding has tended to encourage practices not in keeping with basic, scientifically established standards. The present self-regulatory method, in which the infant is permitted to consume as much as he likes when he likes, often leads to a caloric intake greatly in excess of requirements, with resultant abnormally large gains in weight and accompanying gastro intestinal disturbances. The present tendency to the early introduction of solids often compounds these difficulties and, in fact, has no sound rationale. For the infant with an allergic background, the early introduction of solids may both accelerate and exaggerate allergic tendencies.

There also appears to be an inclination toward too early employment of unmodified whole cow's milk. While under ordinary circumstances no harm may ensue, recent studies point strongly to inherent dangers in the use of unmodified milk in the early months of life. By virtue of its high protein and ash content, unmodified cow's milk imposes upon the immature kidneys of infants a much greater solute load to be disposed of than does breast milk or properly modified milk formulas. The infant receiving unmodified milk in the early months may find himself in serious straits during periods of heat stress. The margin of safety against dehydration, already reduced by loss of water from fever, vomiting, diarrhea or sweating, may be further comprised by the increased water requirements necessary for the disposal by the kidneys of a large solute load.

GENERAL PRINCIPLES IN THE MANAGEMENT OF FRACTURES

BY HARRISON L. McLAUGHLIN, M.D.
New York, New York

A fracture is not a broken bone; it is an injured person. The goal of fracture treatment is neither bony union in good position, full joint motion and strength, nor even full function and a complete absence of symptoms; it is to return the patient to his usual activities as soon and as nearly normal as possible. The way to treat a fracture is not to put the ends of the bone together and immobilize in a plaster dressing until union occurs; it is to accomplish a reduction which inflicts a minimum of additional tissue damage, to establish fixation which interferes a minimum amount with the continued function of the uninjured adjacent structures, and to maintain maximum total function of the injured person throughout the healing period.

THE TIME FACTOR IN THE CARE OF EXTENSIVE BURNS

BY GROVER C. PENBERTHY, M.D., AND
NICHOLAS S. GIMBEL, M.D.
Detroit, Michigan

The survival of the extensively burned patient depends not only upon the procedures that the physician decides to carry out, but also upon his sense of timing. Burn care will be analyzed from the standpoint not only of what should be done, but when and how rapidly. Shock therapy, blood transfusion, nutrition, debridement, anesthesia, and skin grafting will be discussed from the standpoint of time and rate.

From the Surgical Department, Wayne State University Medical College.

From the reports available, it must be concluded that ACTH and cortisone have extensive potentialities for research and limited therapeutic application in the field of cancer.

* * *

The use of hormones as therapeutic agents is limited to those cases in which more generally accepted measures have failed or are not applicable by reason of the nature of the tumor or of its spread.

* * *

ACTH and cortisone have limited value in the therapy of acute leukemia, myeloma and malignant lymphoma.

TREATMENT OF URINARY TRACT INFECTIONS

BY HAROLD J. WALDER, M.D.,
Duluth, Minnesota

Infections of the urinary tract are second only to respiratory infections as the most common types afflicting man. A challenging problem is chronic urinary infections caused by a choliform-aerogenes group of bacteria. Before instituting therapy, data on *in vitro* activity of the drugs against the offending organisms or desirable in selected cases.

Mandelamine continues to be a valuable urinary antiseptic, and is frequently used in many types of infection, particularly in patients who are not to be under constant observation, such as post-operative urinary calculi patients and patients who have undergone prostate surgery. The sulfonamides are still effective therapeutic agents, when used alone, or occasionally in combination with antibiotics in indicated cases. Nitrofurantoin has limited application, and is reserved for use when other drugs, including antibiotics, have failed to give expected response to therapy. Penicillin, streptomycin and novobiocin are rarely indicated for chronic infections. Chloramphenicol and the tetracycline drugs are valuable for infections due to Gram-negative organisms, while polymyxin is specifically indicated for infections due to *Pseudomonas aeruginosa*. Neomycin has a wide range of activity against a wide range of organisms, although it has serious toxic side effects.

Attention is called to shock caused by invasion of the blood stream by Gram-negative organisms. Prompt therapy requires not only antibiotics but pressor agents as well, and at times corticosteroids. It is obvious that all physicians may not have access to a bacteriologist who can isolate and identify infecting organisms. Efforts to obtain such facilities will be rewarded by obtaining favorable results in otherwise chronic and undesirable failures. No rules or charts can take the place of judgment which is necessary in the treatment of each patient.

From the Duluth Clinic.

A high index of suspicion and a thorough investigation on the part of the *first* physician to see the patient with cancer is the *sine qua non* of early diagnosis.

* * *

Of 162,731 people having chest x-rays for tuberculosis, eleven were found to have cancer of the lung, a rate of 19.2 per 100,000.

* * *

The prognosis for cure of gastric cancer has remained bleakly discouraging, but some progress in curative surgical therapy has been achieved.

Peroperative Cholangiography as a Routine Procedure in Biliary Tract Surgery

Saul Sakwa, M.D., and Milton L. Sorock, M.D.
Detroit, Michigan

PEROPERATIVE cholangiography is a useful and informative procedure in biliary surgery, but its acceptance as a routine part of the gall-bladder operation has been met with reluctance. We have noted, and this is well substantiated in the literature, that the number of calculi found in common ducts increase with the number of ducts explored. Lahey¹ stated that 39 per cent of his patients with proven common duct stones had no history of jaundice. For the above reason, and other similarly related ones, along with the simplicity of the procedure, we have made peroperative cholangiography a routine part of our gall-bladder surgery.

The procedure and its advantages have been known for many years, although it has never been widely utilized. Reich² first described its use in 1918 when he investigated an external biliary fistula by injecting the fistulous tract with a thin mixture of petrolatum and barium paste. By this method he obtained an accurate roentgenographic pattern of obstructed bile ducts. In 1929 Cotte³ suggested the advisability of contrast cholangiography at the operating table, but he soon dismissed the procedure as difficult and not too convenient to perform. In 1931 Overholt⁴ reported its first use in the United States. Professor Mirizzi⁵ of Argentina published the first large collected series of ninety-one cases in 1932. Since that time there have been numerous articles in the literature concerning the value of peroperative cholangiography along with various modifications in its technique.

The term peroperative cholangiography refers to a roentgenographic examination of the gall-bladder system by direct injection of a dye into the biliary tree. It has the same indications¹ for its use as exploration of the common duct, that is, (1) history of jaundice, past or present, (2) thickening and dilation at the ducts, (3) small fibrotic gall bladder, (4) cirrhosis of the liver, (5) small stones in the gall bladder, (6) thickened muddy bile, (7) suspected or palpated stones in the common duct and (8) enlargement of the

head of the pancreas. In addition to the reasons above which have been enumerated by Lahey, we list (1) anomalies of the biliary tract, (2) distortion or interruption of continuity of the biliary tract and (3) the location and number of stones present in the biliary tract as additional important indications for its use.

As we have stated above we feel that cholangiography done in the operating room should be a routine procedure in all gall-bladder surgery. Most of the cases operated upon will fall into the enumerated indications above. Several years ago it was noted that the mortality in cholecystectomy was 6.5 per cent. This increased to 10 per cent when choledochostomy was added. In the present day the mortality from cholecystectomy and choledochostomy is practically negligible. The danger today is not in performing common duct exploration but in avoiding it and overlooking common duct stones. This could lead to one or more multiple subsequent operations. The subsequent operations are usually for a developed complication and this of course would increase the morbidity and even mortality.

Because we know that every patient having stones in the gall bladder is a potential candidate for calculi in the extrahepatic ducts, some method of exploring the ductal system should be performed. Intravenous and oral cholangiography are of some help but are not the final answer. Most surgeons will admit that they have missed calculi even after opening the common duct and exploring mechanically. Most of us will agree that if we can make a satisfactory diagnosis concerning the status of the extra hepatic ducts without opening them, it would be most desirable since any trauma to the ducts by physical means would then be avoided. In our experience peroperative cholangiography has given us another very satisfactory tool to add to our armamentarium for use in gall-bladder surgery. Our series has not been extremely large, but it has been sufficient to present convincing statistical data. In our hospital it has been convincing enough so

that almost every surgeon has used the procedure since we first presented our results. In many of these latter cases the results have been most gratifying.

The method we employ is a simple one and we wish to emphasize certain points regarding the technique and ease of performance of the procedure. The patient must be in a horizontal position so as to avoid shadows which may be superimposed by the vertebrae. A cassette holder is placed under the patient in the proper position and a preliminary 8x10 film is taken before the patient is anesthetized. This insures us that the x-ray equipment is working satisfactorily and that the proper focus has been obtained. This will allow for corrections in the timing and exposure of subsequent films. Following this the patient is anesthetized and prepared in the usual manner for surgery. Towel clips and other metal objects are kept out of the field as they might produce obscuring shadows on the film. The cystic duct is carefully dissected and exposed. A ligature is then placed around the duct. A small transverse incision is made in the duct to expose the lumen and a No. 6 ureteral catheter is threaded towards the common duct. The previously placed ligature is then tightened around the cystic duct and catheter. This prevents extravasation of dye and bile into the field. Following this all instruments are removed from the operative site and a sterile towel placed over the wound. The x-ray machine is properly positioned over the operative site. The anesthetist then hyperventilates the patient to obtain a control period of apnea in order to avoid blurring due to respiratory motion. When the anesthetist and x-ray technician are ready, 10 to 15 cc. of 35 per cent Diodrast is injected into the ureteral catheter and a film is taken. Care must be taken to avoid the presence of any air bubbles in the syringe as these may simulate calculi in the common duct. Following performance of the above procedure we usually wait for the results of the roentgenogram. In our hospital this takes from three to four minutes. We have noted that others proceed with the removal of the gall bladder during this waiting period in order to save time. We hesitate to do this as there may be an occasional instance when the use of the gall bladder for an anastomosis would then be indicated or an anomaly of the ductal system may be demonstrated. For these reasons we explore the duct if our cholangiogram so indicates and then remove

the gall bladder as a final procedure. If our roentgenogram report is normal, we of course avoid any further exploration of the ducts.

There are other methods used in performing peroperative cholangiography, and these should be mentioned. One may open the gall bladder and thread a catheter into the cystic duct. We have done one case by this method with good results. At times there may be a complete stenosis of the cystic duct or it may be difficult to thread a catheter into the duct because of an impacted calculus or a blockage of the catheter by the valves of Heister. When this occurs, injection of dye directly into the common duct by a needle and syringe may be necessary. In several of our cases, patients having had previous cholecystectomies gave indications for common duct exploration because of symptoms such as jaundice. It is obvious that in these patients opening and exploration of the common duct by mechanical means was necessary. Following exploration a T-tube is inserted. In such cases we strongly stress the fact that no patient should leave the operating room unless a choledochogram is performed through the T-tube prior to abdominal closure. This will prevent the embarrassment of overlooked calculi and the return of the patient to the operating room for another operation. In our small series two such operations might have been prevented. In a series of 406 cases reported by Mixer, Hermanson and Segel,⁷ they found that out of 146 patients in which cholangiography through the T-tube was performed, nineteen (13 per cent) showed stones still present after the common duct had been explored. These calculi would have been left behind had not a roentgenogram been performed before closure of the wound.

Our series, although comprising only thirty-seven cases, has given us some very interesting data and has made many of our colleagues aware of the need for performance of peroperative cholangiography. The predominant symptoms noted in our patients were colic, jaundice, pruritus, and some form of epigastric distress, as illustrated in Table I. The methods employed were the ones we have enumerated above and listed in Table II.

In most of the cases we desired and attempted to obtain x-rays prior to surgery either by the oral intake of dye or intravenous cholangiography. We then used these preoperative results and compared them with the technique employed at the

TABLE I. SYMPTOMS

Colic	35
Jaundice	8
Pruritus	1
Epigastric distress.....	37

operating table. Although we are fully aware of the information to be gained by intravenous cholangiographic studies preoperatively, we still feel that direct injection of dye into the ducts is the most accurate method of determining the status of the biliary tree. Fifteen of our thirty-seven patients had intravenous cholografin studies prior to surgery. In seven of these patients (46.6 per cent) we found disagreement with the results obtained at the operating table. This is noted in Table III. In six of these patients we had preoperative evidence for performing choledochostomy in one case the cholografin study was described as normal. At operation the six cases presented a normal peroperative cholangiogram, and the common duct was not explored. These patients have subsequently done well with no postoperative complaints. In the one case in which we had a normal study preoperatively, a calculus was noted in peroperative x-ray examination and a choledocholithotomy was performed. We are well aware of the fact that changes can occur from the time the patients are seen preoperatively and the time they are taken to the operating room. For this reason we advocate that not one single diagnostic procedure is sufficient and that peroperative cholangiography should be performed with all biliary tract surgery.

In our thirty-seven cases we have found sixteen in which there were definite indications for the use of peroperative cholangiography. This includes the cases previously mentioned in whom preoperative intravenous cholografin studies were performed. In two of the cases choledocholithotomy was performed with no check x-ray on the operating table following surgery. A postoperative T-tube cholangiogram revealed calculi in the common duct, and these people were returned to the operating room for further surgery. Six of the cases showed complete or partial obstruction of the dye at the duodenum. In all six cases the ducts were opened and explored. Calculi were found in four and a carcinoma of the ampulla of Vater was found in two. Many surgeons experience difficulty in outlining the pattern of the biliary tree either because of anomalies or

TABLE II. METHODS EMPLOYED

Catheter in cystic duct.....	12
Open gall bladder and thread catheter into cystic duct.....	1
Inject directly into common duct.....	3
Inject through T-tube.....	21
Total Cases	37

TABLE III. COMPARISON OF INTRAVENOUS CHOLOGRAFIN STUDIES WITH OPERATIVE FINDINGS

<i>Intravenous cholangiography</i>	<i>Operative x-ray findings</i>
1 Calculus in common duct	None found
1 Dilatation of common duct	Normal ducts
2 Poor visualization of common duct	Normal ducts
1 Question of calculus in the common duct	Normal ducts
1 Unsatisfactory film	Normal ducts
1 Normal biliary tree	Common duct calculus

because of distortions resulting from previous inflammatory reactions in the operative area. This was noted in three of our patients, and the excellent x-rays obtained were helpful in determining our situation and allowing us to proceed with assurance. These patients were spared possible trauma to the ductal system. In three other patients common duct explorations were avoided by the use of peroperative cholangiography. These three patients gave possible evidence of common duct pathology on the basis of previous intravenous cholografin studies. One of the cases previously mentioned concerned the removal of a calculus in the duct after a previous cholografin study was read as normal. Our final case was interesting in that our patient's oral cholangiogram revealed retention of dye within the gall bladder for almost forty-eight hours. A blockage at the cystic duct was suspected, but no pathologic condition in the common or hepatic duct was noted at the operating table and so confirmed with peroperative cholangiography. Only cholecystectomy was performed in this particular case.

Case Reports

Case 1.—Mrs. E. F., aged forty-six, was admitted with a long history of colic and fatty food intolerance. On admission, patient was jaundiced. An intravenous cholangiogram was taken before surgery and read as normal. At surgery an operative cholangiogram was taken with a catheter in the cystic duct. This revealed a dilated duct and no dye entered the duodenum. The common duct was then explored and the calculus found at the ampulla of Vater. Repeat x-ray through a T-tube following the choledocholithotomy showed normal passage of dye into the duodenum (Figs. 1, 2 and 3).

Case 2.—Mrs. C. F., aged fifty-seven, was admitted with two attacks of colic but no jaundice. Preoperative

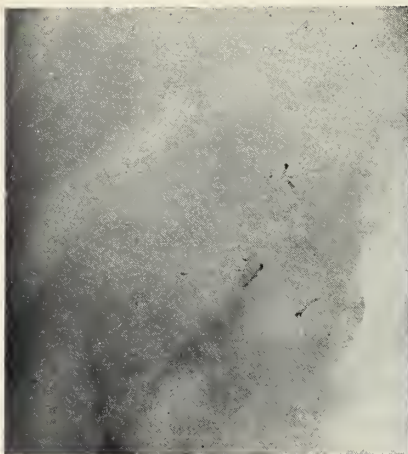


Fig. 1. (*left*) Intravenous cholangiogram. Common duct between arrows. Read as normal.



Fig. 2. (*center*) Peroperative cholangiogram. Catheter in cystic duct. Common duct visualized. No dye enters duodenum. Reflex up pancreatic duct.



Fig. 3. (*right*) Calculus removed from common duct. Now have free flow of dye into duodenum.

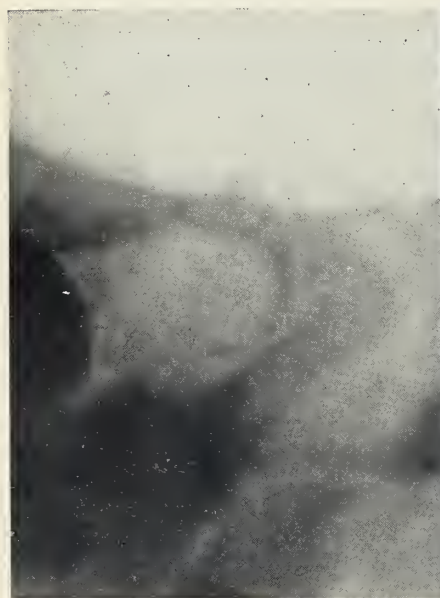


Fig. 4. (*left*) Oral cholangiogram, preoperative. Calculi noted in gall bladder and common duct.

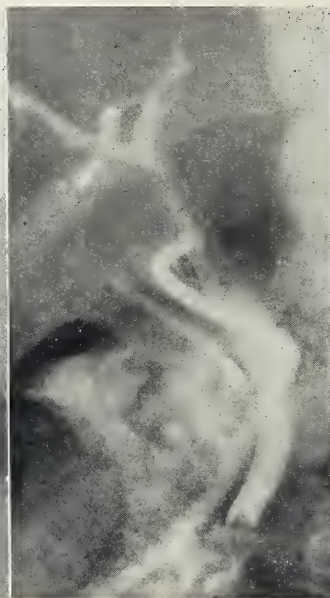


Fig. 5. (*center*) T-tube cholangiogram eight days postoperatively, showing calculus remaining in common duct.



Fig. 6. (*right*) Operative cholangiogram taken after patient returned to operating room and calculus was removed.

intravenous cholangiogram revealed calculi in the common duct and gall bladder. Patient was taken to the operating room, and a cholecystectomy and a choledocholithotomy was performed. No x-ray was taken before patient left the operating room. Prior to patient's discharge from the hospital a T-tube cholangiogram was performed and a common duct calculus noted. This necessitated return of the patient to the operating room for a second procedure (Figs. 4, 5 and 6).

Case 3.—Mr. A. G., aged fifty-eight, was admitted with a six-week history of jaundice. Patient was taken

to the operating room and explored. The common duct was opened and nothing was found. A T-tube was placed in the common duct and a cholangiogram performed. No dye passed into the duodenum. The duodenum was then opened and a carcinoma at the ampulla of Vater was discovered (Fig. 7).

Case 4.—Mrs. L. S., aged fifty-seven, was admitted with a one-year history of colic and one episode of jaundice. An oral cholangiogram taken preoperatively revealed calculi within the gall bladder. In the operating room a catheter was placed in the cystic duct and a

cholangiogram taken. This revealed a common duct which was dilated and contained several calculi. There was also partial obstruction at the duodenum with reflux of dye into the pancreatic duct. After choledocholithotomy the cholangiograms were normal and dye passed freely into the duodenum (Figs. 8, 9 and 10).

Summary and Conclusion

The routine use of peroperative cholangiography in all biliary tract surgery is suggested. Definite indications for its use, methods employed and the technique we prefer is discussed. A series of thirty-seven cases is presented. This series, although small, points out the advantages in using a direct examination of the biliary tree. A comparison between peroperative and intravenous cholangiography is made. Finally, four interesting cases are presented demonstrating convincing evidence for employing peroperative cholangiography as a routine procedure in all biliary tract surgery.



Fig. 7. T-tube cholangiogram at time of surgery, revealing constriction at ampulla.

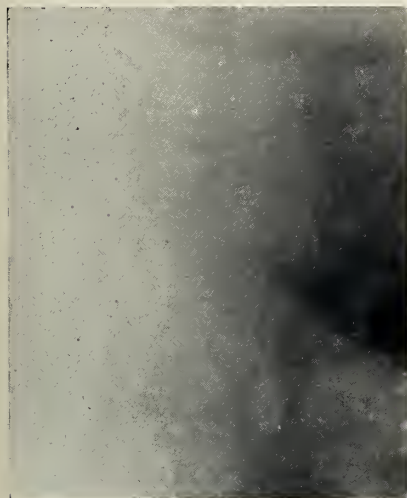


Fig. 8. (left) Oral cholangiogram. Calculi within the gall bladder noted.



Fig. 9. (center) Peroperative cholangiogram. Catheter in cystic duct. Partial obstruction at ampulla with reflux of dye into pancreatic duct.



Fig. 10. (right) Peroperative cholangiogram after choledocholithotomy. Free flow of dye into duodenum. Obstruction relieved.

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Geriatric Rehabilitation

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WITH the expediting of principles relating to geriatric rehabilitation, one must doff the scientific hat to Howard Rusk. He has become a modern reincarnation of Sir Francis Bacon. It was he, indeed, "who rang the bell that called the wits together."

In our great rehabilitation centers—be they the numerous university hospitals or the "name clinics" such as Mayo, Lahey, Ford—there is created a saturation point in partially repaired human beings, short of discharge.

Now comes the day, when the fearful and the halt must leave the institution and continue their rehabilitation at home.

At this point, I must rely upon the metaphor of the bergamot plant. You recall that it occasionally sends a bold shoot from the center of the flower, bearing a bud that eventually unfolds. That is what the geriatric rehabilitant must do—he must bloom again.

The friends and relatives of this half-repaired creature must forever eradicate the false notion from their brains that they are dealing with a second class citizen. At once the motto should materialize: "Here is a *first class citizen, who is but temporarily disengaged.*"

The Home Physician

Somewhere, after discharge and before the passage of a millenium, an essay must be composed by the rehabilitation hospital of initial procedures and forwarded to the doctor on the firing line.

This message need not be filled with smoke-screen trivia, but must boldly hew to some verities for immediate reference and future guide.

From past experiences, I would nominate an outline of its contents as follows:

1. A working diagnosis is greatly desired. Such words as "guarded" and "undetermined" do not sound as though the master might be speaking.

2. There should follow some *reasonable medi-*

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cal exploration of thought that might support the diagnosis.

3. What *instructions* were given to the patient on discharge?

4. What prescriptions did the hospital pharmacy pour into his lap? Are these bottles decently labeled, indicating the actual drug content within? Are such outmoded expressions: "Take as directed" given new birth to plague both patient and home physician? If Nervous Nellie labels confuse the patient, don't think for a moment that they will enlighten the attending man.

5. What are the *specific instructions* from the master-minded clinic to the Medico in the home field?

It is sad to relate that a lapse of time performs a disservice to the continuation of proper therapy. It is sadder to record that a total absence of a letter of instructions plays havoc with all medical efforts. And to tease the elasticity of faith still further, a poorly written and "C minus" type of theme might as well have reached the dead letter office, rather than bang together frayed wits and battling exasperations.

Home Base

Now comes the evaluation of home base for the partially rehabilitated. Shall the leash be 25,000 miles long with all the world to rove in, including spa visits? Are there limitations to the county, the township, the town? Is just the immediate neighborhood permissible for roaming? There are some who can endure only house and yard. Others will be satisfied to settle for bed, bath and commode. Some can manage bed and wheel chair. Alas, we must face it, finally comes the last group involving bed patients only.

Regular Follow-up

The physician who attempts to carry on the procedures of rehabilitation must bounce in upon the patient both physically and spiritually. The fatherly statement, "If you need me, call me," never fills the bill that aggressive instructions and follow up will do. When the doctor's face is

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eternally absent, a new gloom settles in the sick-room. "He's too busy" is the answer. "Too busy with what?" He deals not with dogs and cats and horses but with human beings. This one soul under discussion belongs to that latter category. To be pompous, to be hurried, to be detached—gain no notes of response. If one cannot heal, then he must, at least, inspire. Here are some modified Ruskisms to tuck within your philosophy:

"It is still worth while to recover."
 "If I cannot restore the organ, then I will restore the man."
 "Do not mourn for that which is lost, but rejoice for that which is left, and live and work with it."
 "Avoid the fiddle-faddle of in consequence."
 "Learn to thrive on short clover."

Patients' Needs

The half-healed victim requires certain bodily and spiritual aids that are evident from the first moment of care. Besides cleanliness of teeth, body and feet, and the usual amenities of civilization, there arises the "cry of the bowels" and "the wail of constipation."

I find that most patients, partly rehabilitated, can permit their intestinal tracts to profit from the following formula of fruit compote:

½ pound dried apricots.
 ½ pound dried prunes.
 ½ pound dried figs.
 ½ pound raisins.

Soak over night in equal quantity of water, pound for pint. That results in two pounds of fruit in two pints of water. In the morning, bring to a boil. Immediately, turn down the burner to simmer for an hour. This produces plumpish and appetizing fruit bodies. Cool and place in refrigerator. Each morning serve a liberal bowl of compote, covered with fresh fruit juice, varying each day for flavor change.

Just before breakfast, insert a glycerine rectal suppository. Just after breakfast, expect a bowel movement. If no bowel movement results, offer a pint of warm tap enema, with patient on left side. Eventually, we obtain a "breakfast bowel," and later the compote need be served only twice a week.

At this stage, it is high time that a religious comforter make his regular appearances, be he rabbi, priest, preacher or Christian Scientist prac-

titioner. No physician in his right mind would exclude those who preach hope and who have developed a broad philosophy of life. Dogma may be left with a baby sitter in the parking lot. I have had no problems with the Christian Scientists. Once the healing process sets in, and the level of expectancy is outlined, there is the same philosophical positivity that is expressed in other faiths.

The matter of diet deserves more than passing interest. It has been shown on numerous occasions that old folks, under duress, fail 25 per cent in proper food intake. Proteins and iron-bearing foods are on the "dodge list." A legitimate tonic of vitamin content is always permissible for both physical and psychic stimuli.

I have a favorite "pep pill" that I offer the old folks twice a week, which improves the appetite and aids the consumption of 75 to 90 grams of protein a day. It is concocted as follows:

Place a scoop of steamed spinach or other green vegetable upon a goodly slab of partially broiled liver. Hollow the spinach to hold a dropped-in raw egg. Sprinkle over the top some Parmesan cheese and lay on two rashers of partially cooked bacon. Place this concoction under the broiler and cook till the egg has jelled. By this time the other ingredients are done to a nice turn.

I once had an old lady serve this type of "pep pill" to an entire assemblage of rehabilitated geriatric guests.

Established Routines

As the days become established, routines of care must of necessity follow logically. There are occasions for toilet, moments of exercise and massage, time for bath, rest, wheel chair rides through the garden, and later: occupational therapy.

The patients' complaints must be listened to and some degree of alleviation obtained. The patient who suffers from perseveration may even break his sad routine and offer a new thought. If so, take him up on it.

The routine of the day must be sound but not deadly. A few moments of diversion always get under the skin, such as the new baby next door, newly hatched chicks, the pups in the kennel, the shelf of African violets, the artistic endeavors of some member of the family and the mutually created endeavors in some neighborhood work shop.

Danger Marks

The mop board should possess a wee night lamp for proper guide to the bath room.

All scatter rugs should be removed. Let us not add a broken hip to the present calamity. Grandpa plus slide equals disaster.

Non-skid rubber mats, bearing mild corrugations, should pave the passage ways. All steps should be removed or ramped or conquered with hand rails or parallel bars plus firm treads.

Strong hand bars must be installed over the bath tub. Better yet, a rubber tabbed chair can be placed in the tub or shower. Whenever possible, avoid the sponge bath and let the patient shower himself under his own steam. Such mild activities, if at all permissible, will prevent staleness of mind and body, to say nothing of decubital ulcers. A fixed hot water thermostat will prevent scalding.

I try to avoid all barbiturates. They are inclined to make the patient stiff of limb and contrary of mind. There is the possibility of deterioration of character. A warm drink and reassurance are good assets. A mild pain reliever, combined with codeine or tranquilizer, offers comfort occasionally. There is no success as good as lying down and simply going to sleep after a fruitful day.

Relatives will please deposit their favorite gadgets in the nearest gravel pit. I have had good progress delayed or exploded by some fast-talking, gadget-minded relative, plunging all gain to a standstill. I am thinking of electric belts and misinformation flitting between ultra-violet and infra-red lamps, to say nothing of vibrators. A loud and thumping vibrator over the heart of a coronary patient was not appreciated nor was the tachycardia quickly controlled.

The toys of the grandchildren function as death traps. Grandma on a false leg takes a ride to her doom on a loose roller skate. Let the children bring in their smiles and their kisses but keep their toys beyond the reach of geriatric trip-ups.

The same advice holds regarding sloppy house-keeping. When piles of unused materials begin to show and when articles are disposed of by tossing them into the corners, it is time to fire the house-keeper. If an enfeebled person steps out of bed onto a blob of splashed water or a tossed cloth or a dirty tray and loose dishes, slippery from recent egg and syrup, that is the purified sign of criminal negligence.

Rubbish must be disposed of in regular and orderly fashion. In a sick room, I once witnessed a hurried and worried daughter pile up clean diapers, dirty diapers, groceries and rolled garbage into a foul and stinking, leaning tower of Pisa, awaiting the first breeze or fickle whim of gravity to splash danger and disaster onto an enfeebled ancestress.

Education

Years ago, my father attempted to prove that you *can* teach an old dog new tricks. His subject was a fourteen-year-old mongrel. The educational period lasted only seven days, but the eager old canine chalked up a repertory of six well-established stunts in that short time.

In like manner, these geriatric and partially incapacitated people may be educated along many lines, beyond the mere demands of physical rehabilitation. While the body is being taught to mend and to establish newer and different methods of self care, the mind and the crafts can also be reassociated. I have had a one-armed accountant painfully learn to write and figure with his left hand. But better still, he assumed newer powers of mental arithmetic and arrived at conclusions in faster time than his competitors. He finally was dubbed the "human adding-machine."

Grandma Moses has been reincarnated so many times that I hesitate to bruise her further. Just the same, in my practice I am caring for a hemiplegic, who has learned to paint with her left hand. The first proud nautical scene hangs above her fireplace for all to see and admire. Even I admit, without confusion, the separate identities of water and ships! Daily victories must be won. An intensity of accomplishment produces the after-glow. The gladiator fights with a paint brush!

Kindly refer to the summary for variations on this theme extending to other fields.

Personal Appearance

Nothing is so depleting as the reflected view in the mirror of a haggard old man or a hag view of the female. Doll up Grandma and urge the elderly male to shave and put on clean clothes.

When orderly appearances becomes an expected routine, the better the opportunity for other features of personal hygiene to appear.

Self care and the conquering of the toilet needs become the poured concrete foundation of all

geriatric rehabilitation. It is useless to discuss prosthetics without emphasizing esthetics. Here enters Dr. Bortz's human husbandry. Here is the keystone in the arch of psychic rehabilitation. If we are denied a whole man, let us settle for a partial man, but may he be a sanitary individual. *Freshness from without will inculcate durability within.*

Practical Applications

The previous discussion has set the pace generally. I will select some practical suggestions in the post-diagnostic and therapeutic fields as follows:

The Hemiplegic.—Many of these patients never reach the rehabilitation centers but are cared for at home by relatives or friends. Such care may be of the so-called occasional and drop-in variety and is, therefore, dangerous, as there is no consistency to its quality and no persistency to its drive. The physician must lay down the law of human care, to avoid hopelessness in attempting to escape from calamity.

Let us assume that a proper course of hypotensives has been instituted and that thundering orders have been given regarding care of bowels, bladder and skin.

To describe a hemiplegic, one must conjure the thought of a so-called healthy person who suffers a headache of unusual intensity and suddenly becomes helpless in one leg and arm, with or without unconsciousness and with or without facial distortion.

The affected upper extremity is apt to be found in adduction and internal rotation, with flexion of elbow, wrist, and fingers. The lower extremity may be merely weakened or may demonstrate complete helplessness with flexion and abduction at the hip joint. The knee may be flexed partially, and the ankle is, on occasion, found to be plantar-flexed, with some degree of supination. Rusk recommends a posterior ankle splint to prevent shortening of heel cord. He places a pillow in the axilla to prevent abduction and internal rotation of the shoulder. Passive movements are started early, including abduction, external rotation and overhead position. These movements are repeated several times a day to prevent "frozen shoulder." Rusk deplors this shoulder deformity and the shortened heel cord.

If the relatives are ignorant people, they can at least be trained in full-range passive motion

and mild stretching, to say nothing of infra-red bakes, and Epsom salts fomentations and mild massage. In a simple home of lowly folk, I have obtained excellent results merely because the attendant and the victim never gave up and insisted upon improving upon residual disabilities.

When walking begins, one can employ Rusk's double-bar short leg brace with stump attachment. The patient is less apt to suffer fear in flexing the knee and hip with such an arrangement. Walking begins by moving right arm and left leg forward; then the left arm and right leg. Try not to let the affected arm hang motionless. Parallel bars soon enter in. The helpless hand may be attached to a sliding ferrule, to ease the glide and prevent excoriation. Progress and prognosis vary with the original lesion and the Id of the patient.

Right hemiplegia in a right-handed person demands newer skills and further education for the left hand. While difficult, it can be done.

As soon as muscle tone is partially established, muscles must be re-educated to begin actively what has been accomplished passively. Rotate the shoulder, flex the arm, pronate and supinate the hand, rotate the arm internally and externally and extend the fingers.

Victory is declared for only small accomplishments such as the first lifted piece of bread to the mouth, though they fall far short of final expectations. A handy rocking fork with knife edge becomes a universal feeder.

As soon as possible the patient makes it to the commode or the bathroom toilet. A wheel chair with disappearing toilet vent may be wheeled directly over the toilet. Soon the patient can strong-arm himself onto the toilet seat itself. There are long plastic handles that enclose proper wads to perform cleansing toilet strokes to be followed by damp application if desired.

There are many one-armed devices that aid in self-assistance, such as the one-handed typewriter keyboard, one-handed telephone aid, one-handed wheel chair drive with removable arm rest.

Speech therapy may require a specialist in the field. However, most patients partially recover their wordy needs with aid of family and physician, beginning with word-naming episodes of life and climbing up to expressions describing every day situations.

A close member of my own family remained

unconscious for weeks, yet finally learned to walk again, to talk after a fashion and to play the piano with much resounding vigor, albeit there were a few limps in the sextet from *Lucia*.

One must hope for enough improvement in four to five months to prognosticate eventual levels of rebuilding. Deformities should be prevented but treated when and where they occur.

The Paraplegic.—My experience with the paraplegics begins when the rehabilitation center has left off. A typical case is the elderly man with the traumatized spinal cord or suffering from other pathology. He is apt to be a wheel-chair and bed invalid. However, the folding chair permits rides in the car. He must be trained to manipulate himself to the toilet, to his bed and bath.

There is gross weakness in the lower limbs, which may demonstrate some spasticity. The legs may be flabby and atrophic or somewhat stiff and heavy. As the disease progresses, the tendon and plantar reflexes become diminished or disappear. The patient may subjectively suffer from burning, tingling or coldness. There is generalized wasting. Jerky movements of the ankles may produce traumatic and slow-healing ulcers over the tendo-Achilles.

The bladder problem assumes a high position in family care. Condom-catheter drainage is an ever present aid, but urinary infections must be guarded against. There is some slight hope of bladder training. The gloved finger titilation may start the morning bowel function. An occasional enema and the employment of the fruit compote both are legitimate aids.

The family physician becomes a giant of strength. He must buoy up morale, watch the general nutrition with critical eye and think in broad terms of general health. The patient must be severed from his bed by his own power or by the power of the hovering attendant.

As much rehabilitation as the traffic will bear, with a plus bonus, should be insisted upon and followed up. Here is where hope beyond vanity and courage beyond audacity enter the picture and blot out the element of retreat.

A high protein diet, with good skin care, hovers in the background of constructive morale. If a decubital ulcer develops, simple warm compresses, mild infra-red therapy and powder-puff all are

of assistance. Far advanced cases may require skin graft.

Active motion of the entire mobile portion of the body must be indulged in daily. Passive motion of all flaccid members, plus heat, wet and dry, and massage are daily musts.

The patient sets a standard to manipulate himself from chair to bed and back to chair; from chair to toilet and back to chair; from chair to tub seat or shower seat and back to chair.

Later, with push ups, he may so strengthen his shoulder muscles that he may push himself to the car, enter and with hand controls and hand brakes, succeed in driving with safety.

The patient becomes adept at buttons, snaps, zippers. Pretied elastic shoe laces are a gift from modern invention.

The economic and social disasters must be overcome. Relatives and close family members must not yield to discouragements. The family physician, the psychiatrist, the physiotherapist and the visiting nurse must rehearse in advance to secure a united front of positivity.

Educational adventures for the mentally alert may take them well past self-care. Walking with braces may be accomplished. Such extension courses as illustrative art and accounting could fill the spare moments of the day. In my practice, a paraplegic earns a partial living in creative advertising art. An elderly professional man has now become a bookkeeper and wheels himself to his office quietly and efficiently.

One must avoid a return to infancy and dependency. Accomplishments become majestic in scope. Vegetative existence, with deterioration in mental outlook, can be squashed by physical and psychic exercises that could bear economic fruit.

The patient can become more self-reliant as his productivity mounts. His irascible moods subside to those of moderation and relaxation. He undergoes a second maturation in his older years.

The Amputee.—In discussing the amputee, I will confine my remarks to those geriatric patients who are not mentally afflicted. There must exist an urge to improve and an ability to be taught the logistics of the battles of rehabilitation.

Whether the amputation resulted from trauma, arteriosclerosis, Raynaud's, diabetic gangrene or Buerger's disease, the principles of self-care and the conquering of handicaps remain within the close confines of related solutions.

We hope to inherit a patient with well-healed stump and without flexion deformity. I can well recall a man seventy-seven years of age who was sent home from his surgeon with palliative below-the-knee stump following arteriosclerotic gangrene. There was no thought of ambulation the time of amputation. At home both patient and physician brought up the subject, against the prejudice of the relatives. A one-legged, prosthetic-wearing representative from a rehabilitation firm came to call on demand. He brought along a one-legged, well-prosthetized assistant and a one-legged, excellently prosthetized salesman. These three angels of rehabilitation hopped about the home, up and down stairs, in and out of doors, with the agility of male fleas. Our patient was fascinated. We fitted his prosthesis with an extra heavy stump-stocking and gave him a walker. By the next month, he was out hoeing his garden! Since he was already retired, our strong endeavors were to return him quickly to his self-care, his gardening, his wood-carving, musical instrumentation and other avocational hobbies. He lived long and died happy.

Many a geriatric patient must first walk on a pylon or a mid-leg prosthesis before the high artificial limb may be attempted. A walker, a crutch, parallel bars for all are aids, but Grandpa must eventually take off. Shoes must be well-filled, both on the remaining foot of flesh and the foot of the prosthesis. The toe nails must secure good nontraumatic trimming, and impromptu paring operations are to be avoided.

As walking begins, it should be given in doses; frequent rest periods, alternated with activity, give the best results. This prevents muscle cramps and psychic discouragement. Exposure to severe cold and heat should be avoided. The patient requires coaching as to clothing selection, body care and personal hygiene. Swimming becomes wonderful exercise, provided the pool is not too chilly.

Soon comes the adjustment to home or job or avocation. All associates must avoid psychic trauma, and the element of pity falls to the discard. The competitive visitors, who are traumatic snobs, may be excluded. "My stump is worse than your stump" is no slogan for the day.

If an amputee has not yet retired, I see no broad reason why he should do so. His work may become modified to his new needs or he may take

on a part-time job. An executive may now become a clerk. A mechanic may become an apprentice instructor. A part-time hobby could blossom into a livelihood.

The family must now look at itself in the mirror and stop "mothering" the patient. Overprotection becomes deadening. The sad sack can now be promoted to the efficient titan.

Bilateral above-the-knee amputations for the elderly are almost, by definition, creators of wheel-chair invalids. Some have succeeded in becoming dwarfs with low fitting prostheses. For myself, I would rather be metamorphosed into an active dwarf than an inactive has-been.

The elderly arm amputee may select a masked glove hand on his prosthesis, realizing that one arm is for function and one is for show. However, my experience has covered a few men, past sixty-five, who were properly fitted with functional hooks on their prostheses. A farmer did his own chores and could sling a bale of hay with great ease. A mechanic, who owned his own repair shop, maintained his earning power and economic independence and could manage fine calipering and delicate tooling.

I am certain that the ground has only been scratched in the re-education of the elderly amputee. Much research in veterans' rehabilitation centers, including pectoralis loops, will eventually be reflected into geriatric rehabilitation.

The Coronary Patient.—Several score of cardiacs would present a more challenging experience for me than the multiple problems of one miserable sufferer from Parkinsonism. It is for this reason that I shall dwell on the former and assign the latter to minds more attuned to solving such problems than my own. Also, my experience has covered the placement of many coronary sufferers back on the job, which so far is not true in the case of Parkinsonism.

My activities with geriatric myocardial infarction begin with the home visit, continue throughout hospital care and eventually take us back to the home, and finally to work or satisfactory retirement functions. These patients vary from the amputee, in that I do not inherit them from another service.

For the purposes of this paper, the patient has been properly treated in the hospital and is now home in the bosom of his family following discharge. A typical selection could well be a pro-

fessor, past sixty-five but not yet retired. He is at his best mental peak, lectures with success and is in the midst of writing a book. His rehabilitation is essential for his family welfare and for his own emotional and professional future.

The coziness of the hospital is now past. The competition of life's aggressiveness will soon begin. The physician on the job must dig behind the camouflage of casualness, that he may prevent the creation of a chronic invalid on his hands. "I am a heart patient" need not be quoted from now to eternity.

The proud professor—who once looked down his nose at his less fortunate brothers and thought, "Oh, you miserable ones, how you must envy me"—cannot now do an "umgekehrt" and say, "Oh, you fortunate ones, how you must pity me."

Throughout all of this "shall I, shan't I" episode, the physician assumes the stance of optimism. There may be sixty to ninety days in and about home before responsibility in the work or profession is again resumed. A year's delay would be deadly.

The awakening of sexual desire is, indeed, a good sign and is the first evidence that life does indeed go on.

The cardiac function and the patient's physical capacity must now be weighed medically. The identity of the job at hand or the modification thereof should be within the family doctor's acute consciousness as he evaluates the patient's possibilities.

A home on one floor is desirable, but stairs can be managed slowly and with measured tread.

A poorly informed physician and a well-healed disability insurance policy make a bad combination to eliminate a functional neurosis.

In the younger geriatric group, sixty-five to seventy-five, about two-thirds of my patients return to their jobs, to modified jobs, or to constructive retirement activities. Such disasters as cardiac failure and cerebral accidents may enter the picture, but so do they in other medical fields.

It is a mark of wisdom and world accomplishment to go right back on the job and begin where one left off. There is surety of knowledge. That is where years of happiness were piled up into a head of accomplishment and appreciation.

When a geriatric coronary patient has yielded to the urge of invalidism for one or two years, it is like lifting a horse over the fence to get him

into a gainful occupation, but with skill and proper psychic sharp-shooting it can be done. A community geriatric center and work shop may serve as a good compromise. *To do nothing* is to grow stale and musty. *To do something* is a sip of rich wine to the haggard. The physician can well be the agent to higher level morale, with independence and stimulus for life itself.

One of my amputees was transformed into a coronary patient. He was in his eighties. When he became ambulatory again, his first task was to replace his prosthesis; his next step was a slow stride through the parallel bars and then he settled down to caning chairs for the bride next door.

The geriatric coronary farmer has much to offer. The son or hired man can perform the "slug work" but 50 per cent of the tasks are yet available for father's happiness, following his convalescence.

The plastic industries have done well with such patients and have found them to be meticulous in small matters and advisers in large affairs.

Witness, please, that great numbers of older physicians, each one of whom has indulged himself in a myocardial infarction, then settled down to a 50 per cent or plus practice with joy and husbanded security.

Summary

In the matter of geriatric rehabilitation, I have presented some of the problems and a number of the victories.

Many classifications have been omitted due to my ignorance or limited experience in undiscussed fields.

I have outlined some of the phases of rehabilitation of the elderly: dealing with the family physicians, the rehabilitation centers, home base for the patient, follow-up techniques, patients' needs, established routines, danger marks, education and personal appearance.

There have also been included some practical applications, having to do with the following classifications of rehabilitants: the hemiplegic, the paraplegic, the amputee, the coronary patient.

Let me repeat that activity and hope are the two watchwords that brew the wine in an old man's soul.

In any community memorial center, a proud multi-purpose social wing may be reserved for

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the geriatric citizenry, where the rehabilitants may mingle with their more fortunate fellows or equals.

As they come trooping in, whole or half-whole, think of these possibilities for their fulfillment:

1. Creative writing in the prose, poetry and foreign language fields.
2. Styling creations and style shows.
3. Dramatics, both creative and recitative. Here is a good opening for "The Man Who Came to Dinner."
4. Ceramics. In another paper, I have outlined a quickie mix, consisting of powdered molders' clay, powdered cement, dry water-mix masonry paint and water to putty texture.
5. Artistic endeavors, including oil, water colors and finger painting.
6. Wood carving, cabinet making, combined with home endeavor.
7. Musical compositions and Geriatric concerts. The public may come and applaud.
8. Dancing, by the lively ones and square dance calling by the handicapped. Don't think that age prevents one from being "hep."
9. Public speaking. Coach and be coached.
10. Flower arrangements and gardening instructions. One can wield a hoe from a wheel chair.
1. Pet shows and pet care. Mate up the parakeets and watch the babies come.
2. Swimming participation. Unbuckle the prosthesis and hop in.
3. Ice review. The rehabilitants may create the artistry. I once knew an old lady, who took first prize in ice-skating at age eighty-one.
4. Camera clubs and prize displays.
5. History section. Original papers may be prepared in conjunction with the local historical Society.
6. Travelogues. Here one displays his glorious past.
7. Leather work. Lesser dubs may be taught by better dubs.
8. Hammered metal work. Noise does not matter.
9. Basket weaving. Carry home one product in another.
10. Knit and purl groups. Even the proud male may compete.
1. Americanization program. Here the foreigner

in our midst may absorb from the wise ones, with heads still intact.

22. Tall-tale Club. There is no limit.
23. Stamp and coin hobbies. Much swapping gets under way.
24. Doll making, and toy repairing for the grandchildren.
25. Health forums. Panel discussions are popular.
26. Typing classes. See text regarding one-armed typist.
27. Nature study and bird watching. Nostalgic reminiscing is permissible.
28. Food classes. Here Grandma can add proteins, vegetables and fruits to her tea and toast mainstay.
29. Marketing discussions. The dollar sign and the calories are formally introduced.
30. Extension courses. These are available from the nearest university.
31. Card playing. Other parlor tricks are not excluded.
32. Practical nursing instructions. Fortunate rehabilitants may be taught to care for the less fortunate old folks.

You will note that by my state of breathlessness, I will not be able to bring up the subject of Bingo. I have mentioned thirty or more possibilities. There are a hundred further slants in these categories. Where will the instructors come from? The old folks will sprout their own talent.

My remarks are directed and especially dedicated to the younger family physicians of America. These budding hopefuls must plunge into the situations of rehabilitation in the geriatric fields, where the rest of us have so timidly been treading, up to this very moment of scientific penumbra.

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HISTORY OF HOUGHTON COUNTY MEDICAL SOCIETY

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fields, with a profuse exhibit, we have most delightful prospects of a meeting to be remembered. Dr. T. P. Wickliffe, President of the Upper Peninsula Medical Society, and his efficient committees assure us of this.

I desire to mention a few of our men who have added honor and medical advancement to our Society. Dr. A. F. Laubaugh, of Calumet, served as President of the Michigan State Medical Society in 1908. In fact, he was a pioneer surgeon of note, doing laparotomy for a large abdominal cyst, and operations for appendiceal abscess in the early 1890's, with success at Phoenix, located far out in the Keweenaw Peninsula where he was the mine doctor. His judgment was very keen, and contributed much in consultations with the doctors of this section. He passed away in 1921.

Drs. W. K. West, J. G. Turner, E. T. Abrams, H. J. Joy, A. B. Simonson, and many others were good practitioners. Specialists appeared upon the horizon later. I take much pride in having known these men very well, and in having had the opportunity for close association with them for many years.

It is to the credit of the present active men in the county that they are all maintaining the standards of medicine established in the early days, although under more favorable conditions and with more assistance. Furthermore, our means of transportation has greatly improved, and our association with clinics and greater centers of learning has given more and better contacts, for easier, better and more thorough advancement in medical learning.

Current Trends in Occupational Health

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RECENTLY, a leading industrial physician made the statement that the development of industrial health has been influenced more by social change than by medical progress. This observation has been largely borne out in the metamorphosis which occupational medicine has undergone in the past four decades. In the course of this evolution, three distinct phases may be identified: the accident and safety phase; the occupational disease or industrial hygiene phase; and the broad preventive industrial phase.

The first phase had its origin in the early part of this century with the passage of workmen's compensation laws. Whereas, previously a worker could be discarded when he became disabled, he now had a new security and some protection under these laws. This social development provided an added incentive for industry to take positive steps in accident prevention. In this accident and safety phase, industrial medicine concerned itself almost wholly with traumatic surgery and compensation medicine.

The occupational disease, or industrial hygiene phase initiated by a broadening of the compensation laws to include occupational diseases as well as the industrial accidents, started around 1930. A sound basis existed for this legislation since prior research had identified numerous occupational diseases. However, it should be noted that even today in 1956 not all States provide for occupational disease compensation. During this era industrial health services were largely confined to traumatic surgery, industrial hygiene and compensation medicine.

The broad preventive industrial health phase, or health maintenance stage, started about 1940 just prior to World War II when a serious shortage of industrial manpower was first experienced in this country. It then became necessary to think in terms of conserving the health of the worker and fully utilizing the handicapped and older

workers. Since that time, industrial health services increasingly have given more and more attention to preventive measures designed to maintain the health and productivity of the worker.

Industrial Health Services

The changing character and scope of industrial health programs have been largely dictated by the prevailing social concepts of industry's role and responsibility for worker health. Thus, the early industrial health services were primarily based upon medical care for industrial illness and injuries and the prevention of accidents and occupational diseases. The physician's work, therefore, consisted largely of pre-employment examinations, traumatic surgery and compensation medicine. With an abundance of labor, pre-employment examinations at that time were primarily designed to screen out of employment all but the most physically fit. As industry has come to recognize the importance of conserving the total health of the worker to keep him on the job, industrial health services are becoming increasingly oriented to the early detection and prevention of *all* diseases—not only those related to the occupation. The need for broad preventive services and health maintenance programs is being accentuated by the advancing age level of the working population and the rising incidence of chronic and degenerative diseases. This factor, together with a tightening labor supply, has also influenced the concept of the pre-employment examination. Today, pre-employment examinations are most properly termed preplacement examinations. They are designed to facilitate the placement of the worker in accordance with his physical and mental fitness so as to assure the best utilization of his abilities and to safeguard the health and safety of the individual and his fellow workers. The matching of the worker's physical and emotional capacities to the job is usually a joint activity with the plant personnel department.

Likewise, periodic health examinations, especially of workers exposed to occupational disease

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hazards and of those who need special follow-up, have become an important function of many plant health services. Periodic health examinations serve to re-evaluate the physical and mental fitness of the worker for his job, to detect early any adverse effects from the occupational environment, and to assist workers in maintaining good health. They are particularly useful in the detection of non-occupational disabilities before significant symptoms have arisen. In this early stage, many disabilities are correctable without resulting impairment of bodily function. Together with the pre-placement examination, periodic examinations offer unique opportunities for early case finding of chronic diseases.

Recently, there has been a growing trend to utilize more fully the opportunity afforded by the preplacement and the periodic health examinations for promoting and maintaining the health of the worker. This is achieved not only through the early detection of incipient developing disabilities, but also by helping the worker solve his health and emotional problems through health counseling and appropriate utilization of community health and social resources. Corollary to this trend, there has been a move toward special education and training in health maintenance and occupational diseases for industrial physicians and nurses with emphasis on the preventive aspects.

It is being increasingly recognized that health education and counseling are essential components of effective health maintenance programs in industry. With appropriate emphasis on such health principles as the advisability of seeking early treatment for illnesses, the importance of adequate diet, and understanding of emotional stresses, and the necessity for proper rest and recreation, these services assist the worker to improve and maintain his health status and efficiency, increase his well-being, and prolong his years of productivity.

Further, there is growing awareness that health education and counseling have special contributions to make in reducing or alleviating the psychosomatic symptoms resulting from the stress disorders of modern life. These disorders are of sufficient magnitude to pose a serious problem to industry in terms of employee health and efficiency. In addition to the neuroses and other psychiatric conditions, a large area of lesser psychosomatic illnesses exists which requires careful

attention. These developing emotional disturbances frequently may be detected by alert, sympathetic and understanding industrial health personnel.

In the early phase, many emotional disturbances do not necessarily call for a trained psychiatrist but rather for a physician or nurse familiar with psychological and emotional reactions who knows the temperament of the individual, his occupational, home and community situation, and who will give him sympathetic attention, understanding and counseling. Properly trained industrial physicians and nurses frequently can recognize and assist the worker to solve a wide variety of problems relating to home, family and finances, as well as emotional conflicts relating to his work. Through counseling, guidance and appropriate referrals to medical and social community resources, employees can be assisted to recognize and overcome even more deep-seated emotional problems. To function effectively in his particular area, as well as in the over-all field of employee health maintenance, the industrial physician and nurse must be familiar not only with the plant personnel and operations, but also with the community's health and social facilities.

Another development in the industrial health field which holds great promise is the variety of efforts being carried on to find ways and means of providing health services to workers in small plants. Such services are still not available to about 70 per cent of our working population. How to economically and effectively bring medical and nursing services to the workers in small establishments represents one of the greatest present challenges in the field of occupational health. To date, three general types of industrial health programs for small plants have evolved:

Community Sponsored Programs.—An excellent example of community-sponsored programs is the service offered by the Birmingham, Alabama, Industrial Health Council. Established in 1947 at the instigation of the Chamber of Commerce, the Birmingham Industrial Health Council now serves over 300 small industries and business establishments.

In addition to a central clinic where preplacement and special examinations are performed, the Industrial Health Council provides mobile units in which a battery of laboratory diagnostic tests are given to each employee. These tests include

chest x-ray for tuberculosis, heart pathology and lung cancer; blood test for syphilis; rapid blood sugar test for diabetes; blood pressure reading; weight and height measurements; electrocardiogram for all employees forty years of age or older; eyesight test and tonometer reading to find glaucoma; hearing test; hemoglobin determination; and routine urinalysis. For follow-up care, patients are referred to their personal physician. Each plant also is provided regularly with health education materials and services.

Cooperative Programs.—An industrial health service may be operated by several independent establishments that jointly engage one or more health personnel to provide regular services to their employees at facilities in *each* of the several establishments. In this type of program, a small clinic or office is maintained in each of the co-operating plants, and a physician travels on a regular schedule to all in turn, spending as many hours as the size of the plant and the nature of the health problems dictate. It is important that the plants be located reasonably near each other, otherwise the physician's travel time will be excessive. Many medium-sized plants with this type of program complement the physician's activities with full-time or part-time nursing services. A plan of this general type has been operated in Hartford, Connecticut, for many years, and a similar one was recently started in New Haven, Connecticut. In each instance, six to eight small and medium-sized firms have joined together to share the services of a full-time industrial physician.

An industrial health service may also be operated by several establishments that cooperate in engaging one or more health personnel, a physician and one or more nurses usually, to provide regular health services exclusively to their employees at a single (central) facility which these several establishments jointly maintained for that purpose. In operations of this type, time lost by the physician in traveling is eliminated, although the employees must travel to and from the clinic. The success of this type of operation depends considerably upon how convenient the clinic location is to the establishments using it since management and workers alike are reluctant to expend too much time in travel.

Individual Programs.—In many areas of the country, individual physicians have established

central industrial clinics to provide industrial medical health and nursing services to surrounding small industries. Such clinics may be found in many cities, including Newark, New Jersey; Cleveland, Ohio; Buffalo, New York; Seattle, Washington; Portland, Oregon, and Milwaukee, Wisconsin.

Some of these clinics are broadening their services and are scheduling regular visits by the physician and nurse to each of the participating establishments for plant inspections, consultation and services. This growing practice of bringing the medical service to the work place by industrial medical clinics is based on two acknowledged needs: (1) that the industrial physician and nurse know the working conditions and the physical and emotional demands of the various jobs in the establishments which they service, and (2) that the industrial physician and nurse be regularly available in the plant for service and for health counseling and guidance.

The industrial medical clinic at Portland, Oregon, illustrates the type of services offered by such facilities. Its services include pre-employment and periodic physical examinations, immunizations, survey of work places for elimination of toxic and sanitation hazards, treatment of occupational injuries and diseases, with emphasis on early rehabilitation, and cooperation with the local health department and voluntary agencies in case finding, in controlling infectious and chronic diseases, and in worker health maintenance.

Industrial Hygiene Services

With the increasing emphasis on non-occupational health measures, care must be taken to avoid complacency toward the safety and industrial hygiene aspects of industrial preventive health services. New materials and processes are being introduced daily into industrial establishments. Physicians and nurses must know the health hazards involved and work closely with the industrial hygienists to carry out their joint responsibility in protecting the worker's health. Where no industrial hygienist is available, the physician must assume this responsibility and carefully familiarize himself with the particular hazards involved.

Industrial hygienists and physicians are being asked to participate in an ever-widening variety of activities. More and more, their counsel is being sought in planning new plants and redesigning

old ones, since this method of excluding potential hazards has proved less expensive and more efficient than attempting to control hazards after a building has been completed. Moreover, when a change in manufacturing processes is contemplated, the industrial physician and/or hygienist's advice is being sought increasingly before hazardous materials or processes are introduced. Preventive construction in all its phases is being recognized as a vital foundation stone of preventive industrial health programs.

With the rapidly increasing utilization of atomic energy and various forms of ionizing radiation in industrial processes, industrial physicians and hygienists are being called upon to protect workers against a new and potent hazard, one you cannot feel, hear, see, smell or become cognizant of through any of our human senses. This has required learning how to use new instruments to measure these hazards and to devise new techniques to control harmful exposures. Here again, industrial physicians and hygienists must work closely with construction engineers to exclude potential hazards as far as possible. At the same time, the physician must plan for continuing personal protection of all exposed workers. In this connection, let me urge every physician responsible for workers incurring exposures to any type of ionizing radiation to keep accurate records of the amounts of radiation each worker receives.

With the continuously mounting community concern over air pollution, many industrial physicians and hygienists are studying the possible health hazards involved. Both because of the potential health hazards in air pollution and to conserve valuable materials now being lost, industrial hygienists and engineers are being called upon to devise economical ways and means for reducing the amounts of materials being emitted into the air from industrial establishments.

The control of health hazards on the farm is also drawing upon the knowledge and skills of industrial physicians and hygienists. They have rendered particularly valuable assistance in developing safe methods for the handling of various highly toxic pesticides and chemicals now being used so extensively in modern agriculture.

Noise in industry is another problem that has recently become of grave concern to the industrial physician and hygienists, for exposure to excessive noise may affect auditory acuity. To protect

workers from this hazard, the industrial physician and hygienist have been required to master new techniques and instruments for the measuring and assaying of noise. In addition, they must exercise great ingenuity in devising means of eliminating, reducing and confining noise. At the University of Michigan, a new technique is being developed to determine the susceptibility of individuals to loss of hearing from exposure to excessive noise.

Discussion

The development and expansion of preventive health services for workers in plants, both large and small, require the united efforts of both industrial management and the health professions. No one group has the responsibility, technical knowledge, or skills required to do the complete job. It requires joint study and planning on the part of industry, management and the medical, nursing and engineering professions to evolve satisfactory industrial health services to meet the health needs of all workers in our rapidly progressing technological society.

Two major situations need improvement: (1) some type of industrial health program should be brought to the seven workers in ten now largely without preventive health service of any kind, the majority of whom are employed in small establishments; (2) the health programs now available to the remaining workers, employed mainly in large establishments, in many instances need to be expanded in the area of prevention or health maintenance.

Today, in our efforts to expand and improve industrial health services, we should take cognizance of four cardinal factors that have been found essential to the effective operation of in-plant health programs:

1. The primary aim of all such programs must be to benefit the employee although indirectly, of course, management also benefits. Programs conceived and pursued wholly in management's interest are shortsighted and never become fully effective.
2. The program must have management-labor interest and support. The industrial health department must have assured status and be directly responsible to top management.
3. The medical personnel must be interested

(Continued on Page 1022)

The Problem of the Biologic False Positive Serologic Test for Syphilis

John A. Cowan, M.D., M.S.P.H.

Lansing, Michigan

RECENTLY Earl Moore of Johns Hopkins University was quoted in the literature as stating that 40 per cent of 500 patients routinely discovered to have positive serologic tests for syphilis (STS) reactions were shown by means of treponema pallidum immobilization (TPI) tests not to have syphilis; they were biologic false positive reactors. This figure of 40 per cent, even considering the high economic-social level of the patient, appears to be considerably higher than reported by most other investigators. Nevertheless, it would seem from information available at the Michigan Department of Health and statistics from other sources that the problem of the biologic false positive is becoming increasingly great; one that should be of considerable practical significance to the practicing physician in his diagnostic activities. There are large numbers of routine serologic tests for syphilis made every year on the general population: routine physical examinations as part of the admission processes in general hospitals, pre-employment examinations in industry, premarital and prenatal examinations, and as part of other legal requirements. If only a small number of these tests are possible biologic false positives, the total number of these cases which would then be presented to the physician as a diagnostic problem presents a major dilemma.

Although the major problems in connection with biologic false positive serologic reactions present themselves in relation to the diagnosis or exclusion of syphilitic infections, recent medical literature has pointed out an additional problem in terms of diagnosis which appears to be of increasing significance. There seems to be very little question now that there is a relatively close relationship between the chronic biologic false positive serologic reaction and the so-called collagen diseases. More will be said about this later.

In the fiscal year 1954-1955 there were 4,858 new cases of syphilis reported in Michigan, with approximately 400,000 serologic tests performed at

the Michigan Department of Health laboratories during that same period. In all probability, there were an equal number of STS's performed in local registered laboratories throughout the state. The majority of these are done for the diagnosis or exclusion of syphilis. In most instances, the results of such tests are reported on a qualitative basis as either positive, negative, or doubtful. In all biologic tests it is well known that there is possibility for error. Serologic tests for syphilis are no exception to this rule. In spite of the fact that this test has been considerably maligned in recent years, all factors considered, it is one of the more accurate of our laboratory tests. False positive serologic tests do occur; whether these are as frequent as some people think we are not sure. However, it should be recalled that there are also *false negative* results. False positive serologic tests can be classified in two categories: the technical false positive and the biologic false positive. The technical false positive can mean a laboratory error, a mix-up in the reporting of the laboratory results, or an error on the part of the physician or technician in sending in a mislabeled specimen of blood or serum. The other class of false positives, the biologic false positive, can be classified under two categories, also.

Moore and Mohr¹ in 1952 brought out the concept that there are two types of biologic false positive reactors, "acute and chronic." The acute variety is characterized by its appearance during or shortly after any one of a wide variety of acute infectious diseases of varying etiology and by its spontaneous disappearance (reversal to sero-negativity within a short time) after a few days, weeks or months, rarely if ever exceeding six months (after subsidence of the causative acute illness). The chronic variety, on the other hand, "is characterized by the fact that there is no identifiable acute infection as a precipitating cause, and that sero-positivity with standard STS does not spontaneously disappear, but instead persists for many years, perhaps even for a life time."

Methods ordinarily used to determine whether

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or not a positive STS might be a biologic false positive include: (1) History of infection or treatment (although histories in venereal disease are notoriously inaccurate); (2) physical examination; and (3) history of certain diseases or conditions which potentially may result in biologic false positive reactions, such as infectious mononucleosis, a recent bout of malaria, upper respiratory infection with fever, recent vaccination particularly with virus antigens, and sometimes pregnancy. It is characteristic of false positive reactions that they tend to be of low titre. Frequently there is a disagreement between precipitation tests (Kahn, Kline, Mazzini, Hinton, V.D.R.L.) and complement fixation tests (Kolmer, Wassermann). They also tend to vary in degree of positivity from day to day and between laboratories. Often it is necessary to carry such cases under observation for many months before a decision can be made.

Complement fixation and precipitation tests are ordinarily performed with a nonspecific antigen. False positive reactions, given sometimes by both complement fixation and flocculation tests, have not been completely eliminated by improvement in the methods, techniques, and materials used today. Attempts to grow virulent *Treponema pallidum* in artificial culture media and thereby provide sufficient specific antigen with serologic tests, have hitherto failed. However, a new approach to the problem was made when Nelson and Mayer² devised the *Treponema pallidum* immobilization (TPI) test for syphilis. Virulent *T. pallida* were extracted from rabbit testes into a special anaerobic media in which they were kept alive and virulent for several days. This relatively tissue-free suspension of living treponema was immobilized when mixed with syphilitic serum *in vitro* in the presence of active complement. No such immobilizing effect was obtained with normal or a serologically false positive serum or in the absence of fresh complement. Since a virulent strain of *T. pallidum* was used, the TPI test was considered a specific test for syphilis involving a specific anti-treponema antibody. The validity and specificity of the TPI test has been quite well demonstrated by many observers including Moore, Almon, Curtis, Shaffer, Miller, Chaco, and others.

It has been established that under certain limitations TPI tests can be utilized to distinguish the biologic false positive phenomenon from syphilitic infection with a marginal error of about 2 per

cent. Unfortunately, the TPI test is a complicated biologic immunologic procedure requiring meticulous care in its performance. It is susceptible to technical difficulties which at times may interfere with the validity of results of a given laboratory over a period of weeks. It is time consuming and expensive to perform and provides only qualitative not quantitative results, since a satisfactory method of quantitation has not yet been agreed upon.

Because of these defects, the TPI test is clearly not utilizable on anything approaching a service basis comparable to that of the standard serologic test. Only a few laboratories in this country are capable of its performance. In them the number of specimens which can be accepted for diagnostic purposes is sharply limited. None of this, however, impairs its value as an investigative tool.

In Michigan, TPI tests are being performed at the Dermatological Research Laboratory, University Hospital, Ann Arbor, under the direction of Doctor A. H. Wheeler. A charge of \$25.00 is made for the performance of these tests at this laboratory. The Michigan Department of Health Laboratories have an agreement whereby the serum from problem cases can be sent by the state laboratory to the Venereal Disease Research Laboratory, U. S. Public Health Service, Atlanta, Georgia. No charge is made for the service of this laboratory. It is required that special history forms be made out before sera are submitted. The laboratory requests that only those sera be sent which involve a diagnostic problem and in which the results of a TPI examination would definitely be helpful in coming to a diagnostic determination. Ordinarily it takes from three to four weeks before the results of the test are available, and at the laboratory in Ann Arbor, Michigan, it requires from ten days to two weeks to obtain the results.

Since the development of the TPI test by Nelson and Mayer, other tests using specific treponema antigen have been developed.³ These have been stimulated, at least in part, in order to circumvent the technical difficulties of the TPI test. These tests include, (1) *Treponema pallidum* agglutination test,⁴ (2) *Treponema pallidum* immune-adherence test, and (3) recently the *Treponema pallidum* complement fixation test (TPCF). The latter test has an antigen prepared from virulent *T. pallida* by removing the lipid fractions and then extracting the antigenic material. The resulting antigen is used in a regular complement fixation test. Preliminary results suggest that this test is

of value in the diagnosis of syphilis. The TPCF test is being performed at the present time in a number of laboratories throughout the United States, and it is expected that more laboratories will be making this test available in the near future, provided preliminary results can be confirmed.

Incidence of the Biologic False Positive Phenomenon

It is impossible to determine the incidence of the biologic false positive phenomenon in relation to the population of the United States as a whole or of Michigan. We do know, however, that the biologic false positive, acute or chronic, does occur frequently. Moore's estimate, that 40 per cent of the patients in the high socio-economic levels and high upper educational levels are biologic false positive reactors, appears to us to be extremely high. It is known that most of these cases would be persons who have already been screened by other physicians and were in all probability seen by Moore in his special consultation practice. Moore does state that from unpublished data in an outpatient clinic of lower educational and economic levels, only about 10 per cent of clinically and serologically comparable patients are biologic false positive reactors.

It has been brought out⁵ that in several of the studies reported, including Moore's, the high rate of biologic false positive reactions was a result of the fact that not a single test but a battery of tests, such as the V.D.R.L., Mazzini, Kolmer, and Kline, were used. If any one of this battery was positive, even though the rest might have been negative, this was called a biologic false positive. From this it might be assumed that the high rate of biologic false positives, in at least some of the reports from the literature, is more apparent than real. Incidentally, Curtis believes that the Kahn test picks up collagenous disease less often than many of the other serologic tests for syphilis.

In Michigan, we have been able to get some indication of the relative frequency with which practicing physicians believe biologic false positives are occurring by the requests we receive for approval of special medical dispensations for marriage under Michigan's premarital examination law. During the three year period of 1953-1955 inclusive, seventy-six special dispensations for marriage were approved on the basis of biologic false positive serology. In 1954 and 1955, the sixty spe-

cial dispensations approved on the basis of biologic false positive reactions approximated a little more than 5 per cent of the total approvals. Because the Michigan premarital examination law requires that persons who have a positive or doubtful serology can get married in this state only after approval of a special medical dispensation for marriage, the biologic false positive phenomenon becomes a matter of considerable practical importance. The TPI test, valuable as it is, does not seem to be a satisfactory answer to the problem of biologic false positives under the marriage law for the reasons cited above, particularly because of the difficulty in performance of the test, the expense involved, and the length of time before the results are known. The results, then, are quite often only of academic interest. As this problem is becoming of increasing importance, not only in administration of the Michigan premarital examination law, but also in other cases in which the possibilities of biologic false positives present diagnostic problems to the physician, the development of other more adequate and more practical tests, such as the TPCF test, is eagerly awaited both by physicians and public health people.

Relationship of the Biologic False Positive to Certain Nonsyphilitic Diseases

The etiologic background of the chronic biologic false positive phenomenon has been studied by a number of investigators since 1948. Because evidence suggests that these persons with chronic biologic false positive reactions may have other nonsyphilitic disease, particularly a disease of the so-called collagen type, it has made the serologic test for syphilis of greater importance than merely determining the presence or absence of syphilitic infection. Moore and Lutz state, "Indeed, the physician is no longer justified when he has identified a chronic biologic false positive reactor, in dismissing his patient with congratulations on the absence of syphilis. Instead, he is faced with a lengthy and detailed clinical investigation to attempt to identify the cause of the biologic false positive reaction, and this may and usually does mean prolonged and periodic observation and re-examination." Harvey et al⁶ have pointed out that when disease does develop in these patients "it tends to follow a remarkably uniform pattern, the clinical manifestations of which conform to a series of events known to occur in verified collagen

vascular diseases, especially lupus erythematosus." The relationship of the biologic false positive to some of the collagen diseases such as rheumatoid arthritis, lupus erythematosus, periarteritis nodosa and others, now appears to be more than suggestive. This is particularly true of systemic lupus erythematosus (SLE).

SLE used to be considered a relatively rare disease. Its exact incidence is not known, but the development of the LE cell test has led to the detection of many cases previously regarded as having other disorders. Dubois reported that at the Los Angeles County General Hospital the disease was diagnosed in only eleven patients through 1948 and 1949; during the following two years an active search for new cases was under way utilizing the LE cell test, and a diagnosis was made in forty-four cases. Although these figures cannot be interpreted as indicating any change in the incidence of the disease, they suggest that with better diagnostic methods more cases of the disease will be discovered.

Because it is now possible with the TPI test in practically all instances, to determine whether or not a patient has a chronic biologic false positive, or has a true syphilitic infection, a number of studies are progressing in terms of this phenomenon and the so-called collagen diseases. Clinical and laboratory data of many of these studies strongly suggest that the chronic biologic false positive phenomenon is one manifestation of tissue injury, probably chiefly of collagen and vascular tissue due to an unknown agent or antigen. Apparently, the first evidence of this is in an unidentified alteration of serum globulin known as dysgammaglobulinemia. It is further suggested by these observers that this clinical disturbance is responsible for a number of the observed laboratory phenomena: the biologic false positive reaction itself, increased sedimentation rates, abnormalities of protein flocculation tests, the quantitative increase in serum globulin, the occasional alteration in the electrophoretic pattern of the serum, and the development of the LE cell phenomenon. Harvey and his associates, in a study of 138 cases of SLE found that in verified SLE patients the incidence of the biologic false positive phenomenon was about 20 per cent. It is important to note that it has been pointed out that the discovery of the chronic biologic false positive phenomenon may precede any critical manifestation of SLE by a

number of years. In most instances these biologic false positive reactors, which later turned out to be verified cases of SLE, were discovered to have an original positive serologic test for syphilis on routine testing of apparently healthy individuals. This was true in 62 per cent of the cases. It was pointed out that routine serologic tests for syphilis, although done primarily as a syphilis casefinding measure, also have secondary value in terms of differential diagnosis and also in the prognostication of other systemic diseases, principally of the collagen variety. If one keeps these facts in mind, the present tendency to discontinue routine serologic tests for syphilis on general hospital admissions is quite disturbing. As of recent date, the Committee on Accreditation of Hospitals no longer requires admission routine serologic tests for syphilis for a hospital to become accredited. From the conclusions made by investigators in this field of the chronic biologic false positive reactors (principally Mohr, Lutz, Harvey and others), it is apparent that:

1. There is a probable margin of error of 2 per cent or less in the results of the TPI test.
2. It frequently is first discovered as a result of routine blood testing of persons in apparent good health.
3. It is twice as frequent in women as in men, and in both sexes more frequent in younger persons.
4. It is frequently followed in a few years, especially in women, by the development of verified systemic lupus erythematosus, or by an episodic form of chronic illness, the manifestations of which conform to those known to occur in SLE.
5. The chronic biologic false positive reaction is frequently accompanied by hemotologic disorders; it is also frequently associated with disorders of serum globulin.

Finally, it should be pointed out again that the biologic false positive reaction should not be an end point, but it is recommended as the starting point for further clinical investigation of the patient in terms of the possibility of other nonsyphilitic constitutional disease.

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Keeping the Medical Profession Oriented on Public Opinion

The MSMS study of public wants and needs in medical-surgical coverage by insurance and prepayment plans includes the making of three surveys and the distribution by mail of upwards of 60,000 questionnaires. In addition, the *Detroit Times* will publish the public's survey questionnaire. Thus, an additional half million "ballots" will be circulated mainly in the Detroit area.

The IBM tabulation of the returned questionnaires was scheduled for completion by August 16. Analysis of the results is to be finalized by September 6, and the final report made to the House of Delegates and the public on September 23.

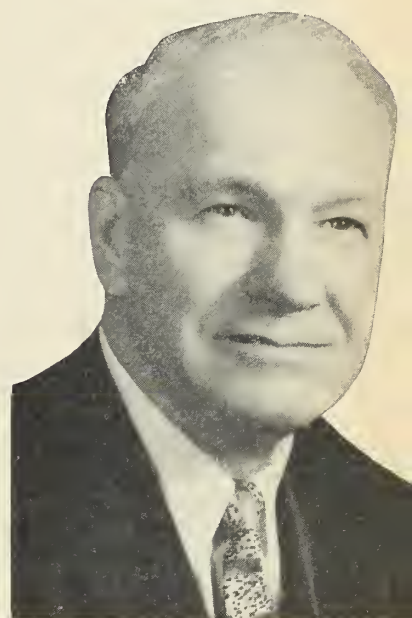
The report will contain an analysis of: (1) the survey of doctor opinion regarding Blue Shield policies and administration, (2) the survey of the wants of both the lay public and medical profession in medical-surgical coverage in relation to the costs of individual medical care services, and (3) the collation of existing data on the medical insurance needs of the public from a medical-scientific viewpoint.

That, in essence, is the story of the progress made since April 27, 1957, when the MSMS House of Delegates initiated the opinion survey.

D. Bruce Wiley, M.D., chairman of the Survey Committee, said, "The MSMS study is the largest and most comprehensive effort of its kind ever undertaken on a state-wide basis. Because of its scope, national attention has been focused on our findings."

This is a big, big study. It will cost money—the hard earned cash of the medical profession paid in dues to the State Society. But it's worth it. For only by constant research of this nature can we hope to continue in an organized fashion to give the public what it wants as well as what it needs.

President's



Message

Rich Walls M-10

President, Michigan State Medical Society

Editorial

UPPER PENINSULA MEDICAL SOCIETY

According to the custom established several years ago of dedicating certain numbers of *THE JOURNAL* to special interests of the members or committees of the Michigan State Medical Society, we are happy to devote this number to the Upper Peninsular Medical Society. In our north country we have an essentially isolated small group with long distances and many difficulties involved in attending the Michigan State Medical Society annual sessions. With devotion to our profession stimulating the establishment of what could almost have been a separate state medical society, they have carried on a program for sixty-four years and have developed a tradition of service and excellence that rivals most any state medical meeting with programs and exhibits.

The Editor remembers attending the Upper Peninsula Society meeting in Menominee in 1912 and the enthusiastic welcome he was given for having been the first state society officer to officially attend their meeting. The past many years it has been customary for several of our officers, the President, President-Elect, Secretary, and others to attend. This year, their President being a member of the MSMS Council, the Executive Committee of the Council was invited to hold its June meeting the day before the Upper Peninsula Meeting, and stay for that occasion. The enthusiasm and satisfaction manifested attested to the value of this meeting.

A token of the efforts of this isolated group is illustrated by the members of their Society who have been President of the Michigan State Medical Society: Beverly D. Harrison, Sault Ste. Marie; A. F. Lawbaugh, Calumet; A. W. Hornbogen, Marquette; Henry E. Perry, Newberry; and William S. Jones, Menominee.

We salute you, UPMS—keep up the good work!

PROFESSION AT BAY

The medical profession again is faced with an accumulation of circumstances which may well lead to drastic economic and social changes. In the 1930's and the 1940's the pressure of social-

ism, the determined effort of governmental and other pressure groups and power-mad ambition-driven forces, kept the medical societies and members on the defensive—always opposing some legislative move or threatening bill—until we earned the reputation of “opposers.”

European nations before us had already passed into and accepted state medicine. Bismarck and Lloyd George used it as a stepping stone to power. Beveridge published his famous report advocating health and security “from womb to tomb.” The facts of social security and government medicine were all about us. Our own Senator Vandenberg told a group of MSMS officers that our prepayment plans, by demonstrating the ability of private medicine to solve both the health and economic need of our patients, had stopped the government move to establish state medicine, and so long as these plans worked satisfactorily, we need not fear government medicine.

New times, new ideals, new ideas, changed trends, together with some modern concepts of health needs and social security, another generation of do-gooders and dedicated leaders in and out of government, have made other problems. Another set of demands and requirements sufficiently different to require great decisions, great adjustments and an entirely modern approach, has developed. The plans of a short generation ago must be readjusted and extended to meet the vastly expanded requirements of our patients and their dominating advisors and organizers. We have made periodic surveys during the years and have expanded or changed plans, but now a major renewal and modernized readjustment of offerings is imperative.

The profession has been blamed on every side for the abuse and misapplications. To be sure the doctor must sign the entrance papers for hospitalization, but he has done that mostly under pressure. The Blue Shield plan was established primarily to care for the low-income patient with a catastrophic illness. As it proved reliable and successful, each group and each patient demanded extensions of service and more help. Each illness and each bed confinement suggested and ultimately demanded care. Hospitals wanted full beds;

the patients wanted convenience of hospital care, as modern houses are not equipped to care for the bed patient. Someone must stay home from work and readjustments in home layout must be made. Since it is so much easier to use the hospital, friends, families, and the sick themselves demand that the doctor send the patient to the hospital. Too many of our doctors gave in rather than see their patients go to another doctor who would comply.

Pressure groups in various forms made expensive demands even to the extent of urging that as long as there was "insurance" every mode of diagnosis be employed so as not to miss anything. Each and every extra unnecessary service costs someone (the subscriber ultimately) more and more money. The result is that the Plans are in temporary financial difficulty. Blue Cross has made four increases in rates in the past five years. Blue Shield now faces its first rate increase since 1949 when the \$5,000 policy was offered. Studies have been made and rates are ready. We are now approaching decisions which *must* be made within the next two or three months. The doctors are compelled to shoulder the responsibility and make the changes even though four parties are blameworthy: patients, hospitals, pressure groups, and doctors.

The doctors are the ones who will suffer most if government medicine comes, as it surely will unless right answers are given *now*. Every one of us must help decide. This is past the realm of our medical pioneers who met the issue twenty years ago. Each and every one **MUST** accept his share of responsibility.

The Threat

Many do not believe the issue is as urgent as pictured. Remember however, that government is ready to administer its kind of medicine. It is now reaching many millions and is increasing every year. Labor is ready to compete with us and undersell, if possible, and promise more and completely-paid care by salaried doctors. Labor has hired a doctor director of its plan for (reputedly) \$50,000 a year. Labor knows they cannot offer more than the medical plans, except as salaries instead of fees will allow, but labor has announced repeatedly that its goal is to demonstrate that full coverage cannot be given at prices their people can pay, so the government must establish medical care—meaning government medicine.

Some doctors may want to work for the gov-

ernment or for some of the labor leaders—we do not. Only one action will forestall that eventuality, and that is complete co-operation with some plan to be evolved by all of our doctors. The decision is up to YOU and it must come before the present Blue plans have exhausted their reserves. Either we make satisfactory plans, adopt controls, accept pro-rating, or surrender.

Government and labor, especially labor, would enjoy administering medical service at no expense to themselves.

THE VANISHED "PHYSICIAN"

The profession now faces a new trend and at a very great disadvantage. In the memory of our older men, doctors were in general family physicians but also the best and closest friend, the first resource in trouble—all types of trouble including the intimate family problems. We loved it and our families loved us for the long and unselfish devotion which was always available and always immediately responsive.

Then came the war and its effect on men—medical and others—resulting in specialization, duty hours, better transportation and training, but less time for our individual patient and troubled family. For too many doctors, that devoted and intimately satisfying period has passed.

An era of attack, misunderstanding, planned deliberate misinformation, biased propaganda from selfish interests, and ambitious social planners, together with some of our own selfish members who showed an unwillingness to work together for the common good of the entire profession, has brought about an entirely different but still soluble economic stress.

MEDICINE AND SOCIALISM

The Conference of Presidents and other officers of State Medical Societies in New York City, June 30, 1957, was the unexpected scene of a most significant discussion of vital interest to the medical profession and their leaders. Three laymen speakers: Oren Harris (Arkansas), Chairman of the House Foreign and International Commerce Committee; Charles B. Shumann (Chicago), President of the American Farm Bureaus; and Oswald D. Heck of New York, Speaker of the Assembly at Albany, all talked of premeditatedly deferred socialism as an established and creeping fact in America for the past generation, and the remarkable preservation of the private practice of medi-

cine in America by the ingenious and effective development of an answer to socialism—the budgeting and prepayment system of medical care. They said that it is most discouraging and unfortunate that the medical profession has been designedly or neglectfully placed in a position of defense or opposition, always appearing as dissenters when apparently desirable proposals are made. The profession must and does see through the trap. It should never have allowed itself to be led by designing social planners who always see the second or third step before making the first. The profession should and really does know the socio-medico-economic need and is censorable for its present role of defense. It must reform, realign, propose and aggressively assume leadership. It can, or someone else will.

In other countries, socialism under many names has taken over 40 per cent, 50 per cent, 80 per cent or even 100 per cent of medical services. In this country it is steadily advancing and now has from 25 per cent to 33 per cent of medical care administered in the land, as witness the Veterans Administration and its constantly increasing number of hospital beds far in excess of the service-connected disabilities which are a just charge to the nation.

Socialism is what the nation or the public does for or to the individual or the group. Naturally, that is nothing, unless by consent, grant or usurpation of materials, for the public is not in itself a producer. Socialism can only be likened to pregnancy. There can never be only a little of it. It takes many forms and many names, it is seductively enticing and unfortunately has been gladly and happily embraced in small idealistic forms. A very much desired favor or help here or there, when help from government or pressure groups seemed the sole method of benefiting, has been the opening wedge.

To continue the advice: the medical societies and their economists, the same men, with some additions, who served before MUST again devise modifications and new programs, must write them into laws or rules and regulations and present them with a demand for acceptance. Otherwise, unfriendly bureaucrats still in government and in dictatorial positions will write the rules not to our liking.

When socialism is basically established it must be progressively accepted or eliminated. There are no evidences of elimination yet. The remedy

is drastic, cohesive action, or submission. Denials by some dissenting members could only spell defeat.

PROMISING FORWARD STEPS

The grass roots, the state and local medical societies, for two decades have tried to start movements of advocating and suggesting new ideals and goals on the national level. Too many times they met the reply that they should start at the grass roots—it is a local matter, not national. The saving grace of the passing era has been the almost universal, but always local or statewide, designing and acceptance of the budgeting and prepaid concept of distributing medical services. The county and state doctors begged for leadership, for information, for materials of national significance. They were only obtainable locally through laborious, desperate and persistent scattered research studies, or discouraging establishment of principles of procedure complicated by error and disappointment, and leading ultimately to the truth as shown by the saving of private medicine in the trial years. Many of our workers, many of our dreamers, without whom we would have failed, have been ostentatiously listened to but ultimately rebuffed.

Every so often someone has broken through the “dread-to-change” and received unwilling approval and acceptance on the national level, and the establishment of a committee or a board or a council to “determine and outline principles.”

For many years dreamers from Michigan offered leadership at the national level—Andy Brunk, Ralph Pino, and others. They were heard, rebuffed, but their ideas, later—sometimes years later—were accepted. This present year the Michigan delegation offered another resolution which was refused by the reference committee after lengthy hearings but whose ideas are now being promulgated nationally under a far different heading.

Another forward movement is now being taken by the AMA. A study group has been reviewing the whole basic structure and organization of the parent body and has made an as yet unpublished report (The Heller Report) which has been seen only by a select few in addition to the Board of Trustees. The House of Delegates has authorized the appointment of a special committee to review and bring in a working model at Philadelphia in December. We believe this is the most important committee ever appointed by the American Medi-

cal Association. The membership of this AMA House of Delegates Committee to Study the Heller Report is as follows:

William A. Hyland, M.D., *Chairman*, Michigan
 Lewis A. Alesen, M.D., California
 Harlan English, M.D., Illinois
 Norman A. Welch, M.D., Massachusetts
 Charles T. Stone, M.D., Texas

The membership are men of vision, men measuring far beyond the traditions of the past, with the valor and persistence to do a job. This could be the most important year the medical profession has ever had, and it has had many great and significant accomplishments. We are happy and proud that Michigan has the chairmanship through such a fine leader as William Hyland.

THE ROLE OF THE DOCTOR IN BLUE SHIELD

Dr. Fred Sternagel, President of the Iowa State Medical Society, and Dr. James W. Colbert, Jr., St. Louis University's Dean of Medicine, have offered sound counsel on shaping the course of Blue Shield. Both agree that the future of these Plans depends upon the guidance the profession gives to their development.

On the President's Page in the Iowa JOURNAL for June, Dr. Sternagel reminded his colleagues that Blue Shield must continue to shape its course in accordance with changing conditions and public demand so that the program would continue to serve as an effective means of budgeting the cost of medical care.

"Blue Shield's job," wrote Dr. Sternagel, "is not yet finished for the spectre of 'socialized medicine' still haunts us. We shall have to co-operate intelligently and unselfishly, if our Plan is to protect the dignity of individual enterprise. It is clear that this program cannot continue to maintain leadership in a competitive field unless we work more closely (with it) than ever before."

Meanwhile, in San Francisco, Dr. Colbert told an annual staff day audience at St. Mary's Hospital that "it is absolutely essential that the plans do not get out of the control of the medical profession; if they do, the profession and the welfare of the patient will both suffer."

The thoughts expressed by Drs. Sternagel and Colbert are to the point. They place in sharp perspective the fundamental principle on which Blue Shield Plans were organized and must con-

tinue to operate. And today, perhaps more than ever before, developments in the health prepayment field necessitate a dedication to the principle of physician control with renewed vigor.

What Dr. Sternagel and Dr. Colbert were saying is clearly and concisely the clue to Blue Shield progress. Their ideas are basic . . . for it is in fact the physician's leadership, guidance, and active participation that are fundamental to the principles and objectives Blue Shield Plans were organized to serve. It is obvious, therefore, that the degree to which the profession contributes to the development of Blue Shield is alone the factor determining the extent to which Blue Shield will *serve the profession and the public best*.

With its strong ties to the profession through local medical society sponsorship, Blue Shield Plans *can* fully serve both professional interests and the public's need for a satisfactory means to budget medical care costs. And over the years, active physician participation in the affairs of Blue Shield has been encouraged and earnestly sought for the reason that those who administer the Plans recognize that in matters of providing health care coverage, it is the physician's judgment, leadership, and counsel that must prevail. It is only under these conditions that health care coverage consistent with the values and traditions of American medicine can continue to flourish and serve the public fully.

CONFERENCE OF PRESIDENTS

The three very vocal speakers at the thirteenth Annual Conference of Presidents all stressed socialism in some form, and all recommended that the medical profession must meet certain persistent and growing demands of our patients and public—demands that must have an answer or become overwhelming. The facts of social progress are with us in government or in dictatorial forces which are constantly demanding and securing more "security" in many fields such as old age, job assurance, and medical attention.

The medical program is especially important to us. The medical profession has established a competing, but not entirely adjusted, prepayment scheme, not even accepted by some of our own members, but which is covering 50 per cent more or less of all medical costs. The working person (or his representative) is demanding, and in other countries is receiving, "complete protection" as

they understand it. The profession must find an answer, more and more comprehensive programs must be made available. We hope most of our subscribers will be willing to buy if they are assured the service will be given as scheduled. No matter what their income level they are geared to monthly payments for almost everything: their car and household equipment, their home, their income tax. They are willing to pay fixed payments on a set monthly basis, including medical costs.

Michigan Medical Service in its first years initiated and was markedly successful in such a program. For the past ten years or more some of our farsighted officers and advisors have suggested that a policy be written and made available on request, giving complete coverage, home, office and hospital, so that no one could claim he could not get "complete coverage." For well over three years, management has been working on an extended service to include office surgery, outpatient surgery, therapeutic and diagnostic x-ray, radium, diagnosis to include EKG, BMR, and EEG, blood, and consultation, to be sold as an extra rider to this basic contract. What held up this extended service was the unwillingness of the medical society to give a "go ahead" because of difficulties in administering.

The speakers in New York City all pointed to a lack of foresight in not making the extensions available before the demand came from organized pressure groups, including the Governor's Commission. It is possible to offer the full program outlined and suggested, but it may be embarrassingly late. The counter efforts of our critics have been announced. We can and must compete and as private individuals give better service than can be done by salaried doctors working by the clock.

For Michigan, this year is fraught with dangers and disfavor from outside, and with inner hesitation and selfishness. The leaders, the House of Delegates, The Council—every available source of plans or advice is being tapped, and that mass of material is being made freely available to every member who will listen or read. Time is now of the essence. We must decide right and now—not next year—which will surely be too late. The small bit of pregnancy is growing—pressure groups, labor, and government have already taken big bites

into our work and privileges and they stand not only ready but willing and anxious to increase their "bite" if we falter in our own plans of offense. This is not a problem solely for the officers and committees, including Michigan Medical Service. **IT IS THE PROBLEM OF EVERY MEMBER.** Whether he agrees or not, he is involved. His personal decision could be the decisive blow if it leads to disunion and dispersed efforts, to "abuse or waste of our talents."

CURRENT TRENDS IN OCCUPATIONAL HEALTH

(Continued from Page 1012)

and competent in developing an effective industrial health program. The plant physician and nurse must concern themselves with improving and maintaining the health of the worker. They must be able to bring the services of the local health department and the voluntary health agencies into the plant and to refer the worker to appropriate medical and social facilities and services available in the community. Moreover, to operate efficiently, the plant physician must have the confidence of, and free exchange of medical information with hospitals, clinics, the local health department and his fellow practitioners in the community.

4. The medical service must come into the plant. Just as the industrial hygienist must regularly visit and check all possible hazards in the plant he serves, the physician and nurse must visit the plant at regular intervals so as to become familiar with the working environment and the physical and emotional requirement of the various jobs. Such visits also provide the medical and nursing personnel with an opportunity to learn about particular situations affecting employee health and enable employees to have free access to them and to gain a feeling of confidence in them.

These services and factors, as outlined, are the elements providing guide lines for the design and development of successful in-plant health programs of today and tomorrow.

* * *

Girl babies seem to be healthier than boy babies: In 1954, says Health Information Foundation, the mortality rate for male infants was 28 per cent higher than for female infants.

DOCTOR, YOU AND YOUR LADY

Are Cordially Invited to Attend the

Officers Night Dinner Dance

Sponsored by

*Michigan State Medical Society
and Woman's Auxiliary*

During MSMS Annual Session

PANTLIND HOTEL, GRAND RAPIDS

Wednesday, September 25, 1957



GOVERNOR G. MENNEN WILLIAMS

Guest Speaker

Reception 7:00 p.m.—Continental Room

Dinner 8:00 p.m.—Ballroom

Informal

Limit of 250

MSMS 92nd ANNUAL SESSION

STATE SOCIETY NIGHT

PANTLIND HOTEL, GRAND RAPIDS

SEPTEMBER 26, 1957



Ken Whitmer, the jack of all instruments and master of many, is one of the bright lights of any show with a mess of heady foolishness involving erratic violins, an umbrella, sax, trumpet and other instrumental odds and ends. Whitmer has a sure-fire routine combining comedy with fine musicianship.



You may call it madness, but we call it Curry, Byrd and Leroy! And they come direct from the Roosevelt Hotel in New Orleans, with their own special brand of insanity. They are reported to dance. They really do, but that's not all. Tagging themselves "Bedlam in the Ballroom," they have hit the nail squarely on the head.



George Johnstone and Betty. An Ed Sullivan show hit, George Johnstone is a screamingly funny magician who doesn't do a trick, but has a way with audiences.

Patricia Melville—a talented and attractive girl who will entertain the guests with her accordion while strolling through the audience.



MSMS Annual Session — 1957

MEETINGS OF ANCILLARY GROUPS

Increasing numbers of specialty societies, alumni associations and other ancillary groups are planning to hold their meetings coincident with the 1957 MSMS Annual Session. Arranged chronologically, these meetings are:

Tuesday, September 24, 1957

Michigan Branch, American Academy of Pediatrics will hold a meeting from 1:30 to 5:00 p.m., reception at 5:30 p.m., followed by dinner at 7:30 p.m., in the Continental Room, Pantlind Hotel.

Thursday, September 26, 1957

Michigan Association of Alpha Kappa Kappa will hold a breakfast-meeting in the Sadler Lounge of the Pantlind Hotel, 8:00 a.m. All Michigan A.K.K.'s are requested to be present.

MSMS Section on Public Health and Preventive Medicine will meet at 5:00 p.m., followed by reception and dinner beginning at 6:30 p.m., in Room 222 of the Pantlind Hotel.

MSMS Section on General Practice will hold its Section Meeting from 5:00 to 6:00 p.m. in the Continental Room of the Pantlind Hotel. Benjamin Jeffries, M.D., of Detroit will deliver a paper on "Psychiatric Techniques for the Generalist." Following this paper an election of Section officers for the following year will be held. F. P. Rhoades, M.D., Chairman, has also arranged for a preprandial at 6:30 p.m., through the courtesy of The Upjohn Company, in the Continental Room preceding the Annual Section Banquet. G. F. Cartland, M.D., will be the banquet speaker. His address, "Romance and Realism in Research," should prove interesting to both physicians and their wives.

Michigan Academy of General Practice, Board of Directors, will hold a luncheon-meeting beginning at 12:00 noon in Room 328 of the Pantlind Hotel.

MSMS Past Presidents Committee will hold a luncheon-meeting at 12:30 p.m. in Room 327 of the Pantlind Hotel.

Michigan Regional Committee on Trauma will meet for cocktails and dinner at 6:30 p.m. in the Sadler Lounge, Pantlind Hotel. The Grand Rapids Committee will be host. Emil M. Roth, M.D., Grand Rapids, will serve as chairman of the meeting. Speaker is Albert Van't Hof, M.D., Grand Rapids, on "Repair of Tendon Injuries."

University of Michigan Alumni will have a reception at 7:00 p.m. on the Mezzanine Floor of the Pantlind Hotel, followed by dinner at 8:00 p.m. in the Kent State Room.

the MSMS Section on Gastroenterology and Proctology will hold its Section Meeting in Rooms D and E, Civic Auditorium, at 5:00 p.m., followed by cocktails and dinner at the Peninsular Club at 6:30 p.m.

Michigan Diabetes Association will meet for cocktails and dinner beginning at 6:30 p.m. in Room 323 of the Pantlind Hotel.

MSMS Section on Otolaryngology will hold its Section Meeting at 5:00 p.m., followed by a reception and dinner at 6:30 p.m. in Rooms 322-324 of the Pantlind Hotel. There will be a speaker after the dinner.

Wayne State University College of Medicine Alumni Association will hold an Alumni Banquet on Thursday, September 26, in the Schubert Room of the Pantlind Hotel. Reception and cocktails at 6:00 p.m., dinner at 7:00 p.m. All alumni, faculty and friends of Wayne State University are cordially invited to attend. Dean Gordon H. Scott of the College of Medicine will be the principal speaker. The banquet

program will be dismissed in time for alumni to attend the State Society Night program. The College of Medicine Alumni Association will also maintain a headquarters suite in the Pantlind Hotel during the annual session.

Friday, September 27, 1957

Michigan Society of Neurology and Psychiatry and the Michigan District Branch of American Psychiatric Association will hold a dinner meeting in the Kent State Room, Pantlind Hotel, beginning with preprandial at 6:30 p.m.

MSMS Section on Pathology and Michigan Pathological Society will hold a meeting in the Continental Room of the Pantlind Hotel beginning at 3:00 p.m. with cocktails at 6:30 p.m. and dinner at 7:30 p.m. There will be a slide seminar on some aspects of bone pathology, which will be moderated by D. C. Dahlin, M.D., of the Section of Pathology, Mayo Clinic, Rochester, Minnesota. All members of the Michigan State Medical Society are most welcome.

Michigan Chapter, American College of Chest Physicians will hold a reception-dinner-meeting at 6:30 p.m. in Room 222 of the Pantlind Hotel. Winthrop N. Davey, M.D., Associate Professor of Internal Medicine, University of Michigan, will speak on "Pulmonary Aspects of Histoplasmosis."

MSMS Section on Nervous and Mental Diseases will hold its Section Meeting at 5:00 p.m., followed by reception and dinner at 6:30 p.m., in the Schubert Room of the Pantlind Hotel.

Women's Organizations

WOMAN'S AUXILIARY, MICHIGAN STATE MEDICAL SOCIETY

Thirty-first Annual Meeting

September 23-24-25-26-27, 1957

Pantlind Hotel, Grand Rapids

Monday, September 23, 1957

10:30 A.M. Report of the Auxiliary President (Mrs. A. C. Stander) to the House of Delegates of the Michigan State Medical Society.

Tuesday, September 24, 1957

12:00 noon Registration opens, Mezzanine floor, Pantlind Hotel.
Hospitality Room opens, Parlor D, Pantlind Hotel.

12:30 P.M. Organizational luncheon and meeting of District Directors—Mrs. Robert Reagan, presiding. Sadler Lounge, Pantlind Hotel.

3:00 P.M. Meeting of 1956-57 and 1957-58 State Committee Chairmen—President's Suite. Mrs. C. Allen Payne, presiding. Pantlind Hotel.

6:00 P.M. Past Presidents' and Secretaries' Dinner

Wednesday, September 25, 1957

8:00 A.M. Continental Breakfast—Pantlind Hotel—

District Directors and County Presidents.
9:00 A.M. Pre-convention Board Meeting (for 1956-57 State Officers, Directors, Chairmen and County Presidents).
Red Room, Civic Auditorium.

10:30 A.M. Formal opening of the 31st Annual Meeting of the Woman's Auxiliary to the

Michigan State Medical Society, Mrs. A. C. Stander, President, presiding.
(Delegates and Board Members will please register with the Roll Call Chairman at the door before the opening of each session, thus eliminating the need of an oral roll call.)

Invocation.

Pledge of Allegiance to the Flag.

Woman's Auxiliary Pledge.

Address of Welcome—Mrs. Garrett E. Winter, Immediate Past President, Kent County Auxiliary.

Response—Mrs. Robert Reagan, First Vice-president, Woman's Auxiliary to MSMS.

Introduction of Convention Chairmen—Mrs. Kenneth Fellows and Mrs. Henry P. Kooistra.

Report of Roll Call Chairman.

Convention Rules of Order

Presentation of Program.

Announcements.

Address of the President—Mrs. A. C. Stander.

Reports of the Officers:

President-elect—Mrs. C. Allen Payne

First Vice-president—Mrs. Robert Reagan

Second Vice-president—Mrs. George Cook

Recording Secretary—Mrs. Harold Machin

Corresponding Secretary—Mrs. F. J. Busch

Financial Secretary—Mrs. Milton R. Weed

Treasurer—Mrs. Francis Krynicki (including report of the auditor)

Report of Finance Committee (and presentation of the budget for 1957-58)—Mrs. Walter S. Stinson, chairman.

Address of National President—Mrs. Paul C. Craig

12:30 P.M. Past Presidents' Luncheon, Ballroom, Pantlind Hotel—Honoring Mrs. William Mackersie, retiring Director, Woman's Auxiliary to the American Medical Association; Past Presidents of the Woman's Auxiliary to the MSMS and representatives of the MSMS.
Greetings—D. B. Hagerman, M.D., President, Kent County Medical Society.
Luncheon Program (to be announced later)

2:30 P.M. General Session—Red Room, Civic Auditorium

Report of Members-at-large Chairman—Mrs. C. O. Willits

Reports of District Directors

Reports of County Presidents—AUXILIARY HIGHLIGHTS

Mrs. Dwight F. Scott, District IX, presiding, Chippewa, Mackinaw, Luce-Delta, Schoolcraft-Menominee

Mrs. R. H. Reitzel, District I, presiding, Huron, Sanilac, Lapeer, St. Clair, Oakland, Macomb, Wayne, Wayne Southern
Mrs. J. J. Burke, District VIII, presiding, Houghton, Baraga, Keweenaw-Marquette, Alger-Dickinson, Iron-Gogebic.

Mrs. John W. Freud, District II, presiding, Eaton, Ingham, Livingston, Jackson, Washtenaw, Lenawee, Monroe.

Mrs. B. B. Bushong, District VII, presiding, Grand Traverse, Leelanau, Benzie, Kalkaska-Northern Michigan.

Mrs. J. Norris Asline, District VI, presiding, Bay, Arenac, Iosco-North Central.

OFFICERS NIGHT DINNER-DANCE

6:30 P.M. Reception, Continental Room, Pantlind Hotel.

7:15 P.M. Dinner, Ball Room.

Thursday, September 26, 1957

9:00 A.M. General Meeting of the Woman's Auxiliary to the Michigan State Medical Society, Red Room, Civic Auditorium.
Mrs. A. C. Stander, President, presiding.

In Memoriam—Mrs. Martin Patmos

Report of Roll Call Chairman

Reports of County Presidents—con't
Mrs. Robert Leitch, District III, presiding, Allegan-Van Buren-Kalamazoo-Calhoun-Berrien-St. Joseph, Branch
Mrs. Harold Gay, District V, presiding, Gratiot, Isabella, Clare-Midland-Saginaw-Tuscola-Clinton-Shiawassee, Genesee
Mrs. Edward Heneveld, District IV, presiding, Mason-Mecosta, Osceola, Lake-Newaygo-Muskegon-Kent-Ionia, Montcalm-Ottawa
Announcements of the Top Ten Counties in A.M.E.F. Contributions, Mrs. Victor Zerbi

Announcements of Counties reaching 100% in TODAY'S HEALTH Subscriptions contest for 1956-57—Mrs. D. Bruce Wiley
Unfinished Business
New Business
Report of Resolutions Committee
Report of Nominating Committee—Mrs. Delbert MacGregor
Election of Officers
Final report of Registration and Credentials Committee—Mrs. John Ten-
Have
Meeting of Executive Committee for 1957-1958—Mrs. C. Allen Payne, presiding

12:00 P.M. Inaugural Luncheon, Kent State Room, Pantlind Hotel
Mrs. A. C. Stander, presiding
Installation of Officers—Mrs. J. Earl McIntyre, Past State President
Presentation of Past President's Pin
Presentation of President's Pin and Gavel
Inaugural Address—Mrs. C. Allen Payne
Adjournment

2:30-4:00 P.M. Post Convention Board Meeting (For all 1957-58 Officers, Chairman and County Presidents) Mrs. C. Allen Payne, Presiding
State Society Night

MICHIGAN STATE MEDICAL ASSISTANTS SOCIETY

September 25-26, 1957

Manger Rowe Hotel, Grand Rapids

Tuesday, September 24, 1957

8:00 P.M. Hospitality Room — Welcoming Committee—Mezzanine
Hostess: Mrs. Marion Horning assisted by the Presidents of each component society.

Wednesday, September 25, 1957

9:00 A.M. Registration—Chairman: Miss Matilda Brechting—Mezzanine
10:00 A.M. Welcome—Miss Doris Jarrad, President
Harold Mikelson, Ph.D., N. E. Missouri State Teachers College
“Division of Duties in Doctors’ Offices”—English Room
Coffee Break—Mezzanine
11:00 A.M. Michigan Medical Service
Mr. Thomas Paton, Moderator
“Medicare”—English Room
12:30 P.M. Luncheon—Hostess: Mrs. Marion Horning
Courtesy of the Michigan State Medical Service—Louis XV Room
2:00 P.M. Business Meeting—English Room
4:00 P.M. View Exhibits at Civic Auditorium
6:30 P.M. Social Hour—Hostess: Mrs. Eileen DeWent
Host: Mr. Kenneth Cook
Music for your listening pleasure—Mezzanine and English Room
7:30 P.M. Banquet—Hostess: Mrs. Vivian Branyan—Louis XV Room
W. O. Badgley, M.D., Lansing, Master of Ceremonies

Thursday, September 26, 1957

9:00 A.M. Registration—Mezzanine
10:00 A.M. Mr. Gerrit Weigerink, Director, Grand Rapids Rehabilitation Center
“Rehabilitation of the Physically Disabled”—English Room
Coffee Break
11:00 A.M. Mr. Don Blanchard, Physicist, Grand Rapids, Butterworth Hospital
“X-Ray Uses of Radio Active Cobalt; Physical and Clinical Aspects”—English Room
12:30 P.M. Presidents’ Luncheon—Hostess: Mrs. Eileen DeWent—Louis XV Room
2:30 P.M. Arthur Murray Dance Studios
“American and Latin American Ballroom Dancing”
4:00 P.M. View Exhibits at Civic Auditorium

* * *

Anyone actively employed in a technical or in an administrative capacity in the office or laboratory of a member of the Michigan State Medical Society, also, administrative employes in the offices of medical hospitals or medical laboratories of the State of Michigan, is welcome to attend all activities of the Michigan State Medical Assistants Society meetings. All activities will be held at the Manger Rowe Hotel in Grand Rapids. Registration fee for non-members is \$2.00, no registration fee for paid members. Deadline for all registrations is September 1, 1957.

August, 1957

Scientific Exhibits

American Cancer Society
Detroit, Mich.

Booth No. S-IX

Benjamin Franklin Clinic
Philadelphia, Pa.

Booth No. S-I

“Technique for Extra-Articular Injection”

Tabular results of injections of hexylcaine and prednisolone tertiary butylacetate into various rheumatic and orthopedic soft tissue lesions will be presented. These will include both acute and chronic conditions. Comparisons of time required for recovery by injection techniques vs. other accepted methods of treatment will be presented. Injection technique will be demonstrated indicating sight by surface anatomy and placement of needle by cutaway art.

Henry Ford Hospital
Detroit, Mich.

Booth No. S-V

Mary Free Bed Guild Children’s Hospital and Orthopedic Center
Grand Rapids, Mich.

Booth Nos. S-X, S-XI

An exhibit showing types of patients treated at Mary Free Bed Guild Children’s Hospital and Orthopedic Center with special emphasis on treatment of the child amputee. Pictures are used to show different phases of physical therapy, occupational therapy, nursing and follow-up care in out-patient clinic. Latest prosthetic components will be displayed.

Michigan Cancer Coordinating Committee
Lansing, Mich.

Booth No. S-VII

An exhibit dealing with the problem of Cancer Quackery. Something beneficial can always be done for the terminal cancer patient by the reputable M.D. This display will prove this statement. Colored slides, photographs and X-rays plus literature dealing with the problem, and gadgets which have been used to treat cancer, all help to emphasize the fact, that the medical profession has much more to offer these patients than does the “quack.”

Michigan Heart Association
Detroit, Mich.

Booth No. S-XII

Michigan Pathological Society
Detroit, Mich.

Booth No. S-III

Michigan State Medical Society
Lansing, Mich.

Booth No. S-VIII

This exhibit features Ideas for MSMS Headquarters. Other state medical societies have built adequate “homes” for their executive offices. MSMS is committed to do so also, and constantly rising construction costs demand immediate action. This display says “Look at what others have done? What shall we do?”

Michigan State Pharmaceutical Assn.
Lansing, Mich.

Booth No. S-VI

Pharmacy, as one of the members of the Michigan Health Team, displays methods of introducing the many new drugs that are playing so large a part in combatting disease. Figures and examples graphically illustrate the volume of new items that are introduced each year in the field of medicine to serve our first concern, the patient.

The Straith Clinic
Detroit, Mich.

Booth No. S-II

Numerous Kodachrome enlargements, showing methods of treating deformities as harelips, cleft palates, protruding ears, nasal deformities, birthmarks, breast hyperplasias, et cetera. Slides showing plastic closure of traumatic wounds, facial fractures, hand and tendon repairs, treatment of malignancy and plastic repair.

Wayne State University Medical Alumni Association
Detroit, Mich.

Booth No. S-IV

A pictorial progress report of recent developments in the Wayne State University Medical College area.

Annual Reports

ANNUAL REPORT OF THE COUNCIL 1956-1957

The Council held three sessions totalling six days, and the Executive Committee of The Council convened eight days (to September 21, 1957), a total of eleven meetings up to the date of the 1957 Annual Session of the Michigan State Medical Society. This represented a total of 102 hours of deliberations, equivalent to thirteen days on an eight-hour working day basis, but, as in the past, this total does not include additional time necessarily spent by the twenty-six members of The Council going to and returning from meetings held in various Council Districts throughout the state. All matters studied (899 items) and recommendations made by The Council's thirty-nine committees, as well as by the Society's twenty-two committees, and all business of the Society, were referred routinely to The Council or to its Executive Committee for consideration and action.

Membership

Membership as of June 30, and as of December 31, from 1935 to 1957, is indicated in the following chart:

	1935	1945	1950	1954	1955	1956	1957
June 30	3410	4425	4881	5111	5503	5794	6104
December 31	3653	4686	5114	5787	6109	6360	

The figures for 1957 include 5,291 Active Members, 286 Emeritus and Life Members, 74 Retired Members, 453 Associate and Military Members.

Finance

As in the past, the first item of new business on the monthly agenda of The Council or its Executive Committee is "Study of Monthly Financial Reports." Every thirty days, therefore, the Society's financial picture is reviewed and governing policies established. In addition, the Finance Committee meets periodically to study and to advise The Council on particular fiscal questions.

The auditor's report for 1956 was published on page 634 of the May issue of THE JOURNAL, and the budgets of the Society for 1957 were published in the March number, beginning on page 375. Members are invited to acquaint themselves with the financial status of their State Medical Society and to offer suggestions; these always are truly appreciated. As of June 30, 1957, 5,434 members paid Society dues amounting to \$154,869.00. This was on the basis of \$28.50 per member allocated to the General Fund as established by The Council in January, 1957, and includes some payments by new members of portions of a year. Also, \$16,303.50 accrued to the Public Education Reserve, \$34,632.89 accrued to the Public Education Account, \$19,315.57 accrued to the Public Service Account, and \$29,035.27 accrued to the Professional Relations Account, for current activities as directed by The Council in January, 1957. The sum of \$11,053.22 was set aside in a present Building Maintenance Fund, as well as \$27,172.50 to a new MSMS headquarters fund. A brief financial résumé of each of the MSMS activities as of June 30, 1957 is presented in the accompanying table.

The AMA dues collected by county medical societies, forwarded to MSMS, and then mailed to the American Medical Association during the six months to June 30, 1957, totalled \$133,487.50. The very high percentage of AMA dues being paid by MSMS members (98.3 per cent) is to be noted; The Council feels that the members of our State Society are to be congratulated on

their tangible co-operation with and support of the American Medical Association. A résumé of the financial condition of the Michigan State Medical Society as of August 31, 1957, will be presented to the House of Delegates at its opening session of September 23, 1957, as a part of The Council's Supplemental Report.

Financial Report for Period Ending June 30, 1957

Account	On Hand 1/1/57	Income to 7/1/57	Expenses to 7/1/57	Balance on Hand 7/1/57
General Fund	\$ 89,870.56	\$159,371.71	\$ 92,466.36	\$156,775.91
Annual Session.....	0	28,430.00	7,177.64	21,252.36
Michigan Clinical Institute	0	13,650.00	13,302.75	347.25
THE JOURNAL	0	68,919.49	54,123.51	14,795.98
Public Education..	73,891.87	34,632.89	31,871.19	76,653.57
Public Service	3,675.16	19,315.57	10,492.72	12,498.01
Professional Rela- tions	4,897.50	29,035.27	17,610.47	16,322.30
Public Education Reserve	57,245.00	16,303.50	0	73,548.50
Rheumatic Fever Control	7,675.56	8,437.01	7,491.11	8,621.46
Contingent Fund..	53,614.34	0	0	53,614.34
Building Maintenance Fund	14,124.94	11,053.22	2,792.93	22,385.23
MSMS Headquarters Fund	0	27,172.50	0	27,172.50
TOTALS:	\$304,994.93	\$416,321.16	\$237,328.68	\$483,987.41

Thus far in 1957, \$50,000.00 of the funds of the Michigan State Medical Society have been invested in short-term securities. These funds are invested during the early part of the year when income resulting from dues payments is high and thus earn interest for the commercial account. These securities mature later in the year when income is low and expenses continue at the regular rate. Any securities maturing, the funds from which are not immediately required, will be reinvested upon the advice of the Finance Committee.

The Journal

THE JOURNAL OF THE MICHIGAN STATE MEDICAL SOCIETY was established fifty-six years ago to carry out the projected "modernization" of the Medical Society, changing it from a group of a few hundred members with one annual meeting and one annual publication, to a fully democratic body, with branches in the counties and with representatives in a central governing body. Some method of frequent communication had to be established, and the Secretary, Andrew P. Biddle, M.D., established THE JOURNAL, to be published monthly.

For fifty-six years there has not been an interruption. THE JOURNAL has brought to the membership, medical and scientific papers of the highest quality prepared mostly by our own members, but including some each year by the foremost authorities of our profession who have been glad to come to our Annual Sessions and give their best. THE JOURNAL has also brought to our members news items and official communications, and has carried the messages of our officers and administrative groups, in addition to the official reports of legislative action.

During the past ten or more years the Publication Committee and the editorial staff have been happy and proud to dedicate almost every number to a special interest: an outstanding local county or district organization, committee, clinic, or activity in the public interest. Each year we have listed some of these interests and have set them apart with specially designed and unique covers, mostly in two colors. We are glad to report

that acceptance has been favorable and many of the other state medical journals are following suit.

July, 1956, was, as always, devoted to the Annual Session and pictured a doctor pointing and all roads from the far corners of the United States leading to Detroit. The August issue on trauma featured the application of a plaster dressing; this issue also contained a Directory Supplement. The 28th Annual Ingham County Clinic was the subject of the September number, spotted on a Michigan map, with stethoscope, hypo, et cetera, to add color. October was devoted to Diabetes Detection, with the cover carrying pictures of five great leaders in this field. Michigan's Public Service was the subject of the November issue with reports from twenty-eight service groups, presented primarily for indoctrination of new members. December was devoted to the Michigan Clinical Institute with the cover showing a doctor on call. The January number was devoted to Heart with a segment of heart surgery gracing the cover. A symbolic large crab on the cover of the February issue called attention to the Genesee County Cancer Day, and a healthy little girl illustrated the cover of the March Journal devoted to Child Health. April featured Cancer: "Medicine" fighting the many-headed dragon, while May with Geriatrics as its interest was illustrated with a sylvan scene. June, Michigan Medical Service, showed crossroads signs and directions.

Medico socio-economic problems again have occupied most of our editorial effort. Due to the pressure on our Blue Shield Service Plan and the necessity of calling an extra session of the House of Delegates, we have devoted increasingly great space in text, news, reports and editorials to that vital part of the Society.

We have again been very thankful to certain chairmen and others designated to assist in gathering material, writing editorials, and doing general supervision when we have been preparing a special number. The Editor's work with the Publication Committee, the Executive Committee and the official staff has been a pleasure and a stimulus to continued service. This year we are pleased that an Assistant Editor has been selected, a man of editorial experience, and that the continuity of THE JOURNAL is assured.

Organization

1. The Annual County Secretaries—Public Relations Seminar—a three-day indoctrinational course—was held in Detroit on January 25, 26, 27, 1957, with 150 attending. The theme was "Protecting our Heritage" with the first two days devoted to discussion of problems facing prepaid medical care plans. This was in accord with the oft-expressed feeling that more information on Michigan Medical Service should be funnelled to the medical profession of Michigan, particularly to its leaders on the local level.

2. The Eleventh Michigan Clinical Institute was held in Detroit, March 13, 14, 15, 1957, with an attendance of 3,243, including 1,654 M.D.'s. The popularity of the MCI, as a purely scientific "refresher course," improves year after year.

3. Our AMA Delegates and Alternates are doing efficient work and are gaining well-merited recognition in the AMA House of Delegates. Proof is that the Chairman of the group, Wm. A. Hyland, M.D., of Grand Rapids, was appointed in July as Chairman of the all-important AMA Study Committee on the Heller Report, calling for extensive revisions of the AMA organizational set-up. R. L. Novy, M.D., Detroit, was re-elected a member of the Council on Medical Service.

4. The Residents-Interns-Senior Medical Students Conference was held in Detroit, March 15, 1957, coincident with the Michigan Clinical Institute. MSMS again sponsored the sending of Delegates from Michigan's two medical schools to the Student AMA Convention in Philadelphia in May, 1957.

5. The 91st MSMS Annual Session in Detroit, Sep-

tember 26, 27, 28, 1956, attracted a record registration of 4,300, including 2,464 M.D.'s. This meeting has gained the reputation as one of the three best state medical conventions in the country.

6. More national medical leaders from Michigan are gaining recognition: during the 1957 Michigan Clinical Institute, eight Michigan doctors of medicine were honored for currently achieving the presidency of national medical associations:

- J. S. DeTar, M.D., Milan—American Academy of General Practice
- Cameron Haight, M.D., Ann Arbor—American Association for Thoracic Surgery
- Charles G. Johnston, M.D., Detroit—American Association for the Surgery of Trauma
- Rupert C. L. Markoe, M.D., Detroit—American Academy of Tuberculosis Physicians
- Edgar E. Martner, M.D., Detroit—American Academy of Pediatrics
- Norman F. Miller, M.D., Ann Arbor—American Gynecological Society
- Robert L. Novy, M.D., Detroit—National Association of Blue Shield Medical Care Plans
- William D. Robinson, M.D., Ann Arbor—American Rheumatism Association

7. Leon DeVel, M.D., of Grand Rapids, for eight years Medical Co-ordinator of the MSMS Rheumatic Fever Program, resigned as of February 1, 1957, after performing an outstanding job in the pioneering work of rheumatic fever organization. The Council feels that a new position of "Director of Scientific Activities" of the Michigan State Medical Society should be created; all preventive medicine activities of the Society, such as rheumatic fever control, geriatrics, child welfare, maternal health, cancer control, et cetera, could be co-ordinated by such a full-time M.D. employe of the Society. A special committee is investigating possibilities in this direction.

8. The American Medical Education Foundation work in Michigan is being vigorously spearheaded by C. E. Umphrey, M.D. of Detroit, Chairman for Michigan. The tangible co-operation of all members is urged.

9. In July, The Council appointed Louis J. Bailey, M.D., of Detroit, as Assistant Editor of THE JOURNAL, MSMS.

10. A Special Session of the House of Delegates (the first since 1939) was held April 27, 1957, in Detroit to inform the Delegates and the profession in general on the condition of prepaid medical insurance programs of this state. The Delegates were faced with the bare fact that Blue Cross-Blue Shield and the commercial insurance companies are facing heavy losses due to increased costs of health care and accelerated utilization. Valuable information on the status of plans in and outside Michigan was presented and discussed. A market-opinion survey of the public and the medical profession was authorized.

The MSMS Market-Opinion study began with interviews on July 8. Some 61,000 questionnaires to the public will be sent and the returns will be analyzed in connection with the returns from an additional survey to the 6,100 members of MSMS. The Director of the Business Research Institute of Michigan State University, Mr. David Luck, has been retained as consultant; the Market-Opinion Research Company of Detroit is conducting the interview survey portion of the study under the supervision of Mr. Richard Oudersluys, Managing Director. Lansing is used as the "control" with 10,000 questionnaires saturating this city. The *Detroit News* and the *Detroit Times* (total circulation is 1,100,000) have volunteered assistance by running the mail survey questionnaire in their newspapers—which generous co-operation will greatly expand and make more valuable this survey. IBM services are being used to tabulate

and analyze the returns. The whole report will be ready for presentation to the House of Delegates on September 23.

11. The groundbreaking of the Wayne County Medical Society's new building was an historic event of December 19, 1956; MSMS is supplying a documentary film on the erection of the WCMS edifice.

12. Organization among the fifty-five component societies, covering all of Michigan's eighty-three counties, was well maintained during the past year. The scientific side of medicine in this state continues at an all time high. MSMS is gratified at the increased interest in socio-economic matters on the part of its component societies, evidenced by many more requests to the State Society for speakers, assistance, and information.

Public Relations

It is one thing to look back on a score of years of effort in public relations with some degree of satisfaction. It is quite another to be able to look ahead.

The public relations program of the individual doctor of medicine, as well as of his 6,100-member state-wide Society, has been a continuous, everyday effort. It must continue to be, as the profession adapts its service to the changing needs of our people and our economy.

Today, the greatest single danger to the good name of the medical profession can be designated with one word—"money."

Our strenuous efforts to tell the story of advances in medical service and science, the successes in establishing public service and educational programs, the sincere and devoted work of men in medical organization to meet the public medical needs, will fail of their intended objective unless the financial problems surrounding the provision of medical care are solved to the satisfaction of the public.

A tremendous effort is being made by way of the greatest survey ever attempted by a state medical society to assist the voluntary health insurance and prepaid medical care plans to meet the need of a satisfactory mechanism to satisfy the financial obligations of the public to the profession.

In addition to this, however, is the very real problem which also requires the help of every M.D. if it is to be solved satisfactorily. Namely, for every doctor to "sell" every member of the public on the idea that the "price is right" for his services. The techniques for doing this job are known, the qualified personnel for assisting the profession are with us, but the will to do this and the continued effort to succeed must come from a dedicated profession.

Methods of mass communication have been utilized this year in the same effective fashion as in the past. A full recounting of them in this report is impractical. Suffice it to say that voluntary medicine must continue to amplify as never before its communication, by every possible means, with others in the health field and with the public.

However, just a few highlights of Public Relations activity bear special mention.

Every year an increasing number of the bills introduced into the House and Senate in Lansing affect the doctor's practice of medicine and the provision of health care to his patients. This is caused by the new public health problems inherent in the growing complexity of medical science: e.g., atomic energy and radiation. It is a tribute to the public stature of Michigan M.D.'s and the high esteem in which they are held by the lawmakers (maintained and enhanced by a strong P.R. awareness on the part of the individual physician) that this interdependence between legislator and doctor of medicine continually provides Michigan citizens with the best health care legislation.

Medical Education Week, the second annual salute, was once again a successful educational drive in Michigan. MSMS acted as statewide co-ordinator for the

group effort by county medical societies and medical schools.

The Publicity and news coverage of MSMS activities during the year hit an all-time high. Radio and television public service programs continued as a valuable asset to medicine. The 91st Annual Session in Detroit was noted for its utilization of on-the-spot radio and television coverage, marking a heightened interest in the scientific and policy aspects of organized medicine.

The MSMS co-sponsorship of the live heart operation telecast in color from Detroit's Grace Hospital during the Michigan Clinical Institute provided an unprecedented opportunity for MSMS in the public service field. And for those areas in Michigan which were unable to carry the actual telecast, MSMS shared the cost of making a kinescope and supplied it for rebroadcast at later dates throughout the state. More than 2,000 letters commending this telecast were received.

Another successful publicity campaign was Operation Armor, the doctors' own effort to urge public acceptance of all immunization procedures. Special emphasis was placed on having these done in the doctor's office. More than 150 Michigan newspapers carried one or more of MSMS's press releases on this subject and national recognition of our program was received.

The MSMS Public Relations Library is rapidly nearing completion. Permanent metal shelving, film cabinets, record cabinets, files and card catalogs have been installed in the MSMS headquarters, and most of the material for the library has been cataloged and shelved under the direction of professional library consultants. Among available items from the library are films, radio transcriptions and tapes, kinescopes, speeches, books, and brochures on various medical public relations and medico-socio-economic subjects. In addition, items of historical value, such as the permanently bound volumes of the State Medical Society beginning with the year 1859, are maintained. Added to the P. R. Library this year was a new MSMS production, "Something Called Epilepsy." This fifteen-minute sound, color, motion picture dispels the mystery and misunderstanding which can surround this disease. Special emphasis is given to the control and curative advances of modern medicine. Resource material from the library is available on free loan to all members of the MSMS, its auxiliary and ancillary groups. This is proving to be a valuable tool in the public relations work of the Society.

Among its other advisory services in public relations, the MSMS is assisting the Michigan State Medical Assistants Society in setting up an educational training program through college and university extension and short course facilities. The ultimate objectives are to broaden the existing knowledge of physicians' assistants and to aid in the training of new assistants.

The public relations effort of the medical profession has borne fruit. This is well, for there are those who would cast aside the traditional scientific methods and substitute new and unproven ways of dispensing and paying for medical care. To combat this cavalier approach to a recognized problem, the doctors will need every ounce of public understanding they have managed to produce over the years.

Woman's Auxiliary

The fine work being accomplished by our Medical Auxiliaries throughout Michigan reminds one of a symphony. The many fields in which we work is like an elaborate piece of music written for a full orchestra. And, as a symphony, which is written in four movements, we feel that we have successfully played the passages written for us. In the first movement of a symphony the theme is developed, and is played throughout the score. Our theme for the year was "Full Time Citizenship." This theme led us right into the national election. At this time the auxiliary set up dozens of "Get Out The Vote" telephone centers, which were under the direction

of the Michigan State Medical Society. At this time we realized the importance of medical auxiliaries, as our work was quickly accomplished among the organized groups. There were several spots, however, that we were unable to touch because of no organization. In the "Year of Decision," a national election year, it is important for us to do a complete job, but only until we are completely organized will this be possible. Also, in legislation, our auxiliaries were informed on all major medical issues.

In Civil Defense 50 per cent of our auxiliaries participated in some form or another. The First Aid Course given by Red Cross found at least 25 per cent of our members enrolled.

In *Today's Health*, a struggling activity of the Auxiliary, we reached a state total of 61 per cent, after much hard work. Mason County topped the list with 633 per cent, followed by St. Joseph, Newaygo, Sanilac, Huron, Wayne Southern, Monroe, Eaton, Midland, Gogebic, Macomb, Berrien, Muskegon and Washtenaw having 100 per cent or over. We are grateful to all counties for their great effort.

Our Public Relations project has been in the realm of Science Fair. This we felt was important, as the next National Science Fair will be held in Flint in 1958.

Our Tuberculosis Speaking Project, which is co-sponsored annually with the Michigan Tuberculosis Association, again had an exciting year. Two thousand nine hundred and ten students entered from eighty-eight schools throughout twenty-eight counties. These students spoke to audiences totaling over 14,000 people. An undetermined number of persons were reached when twenty-four of the schools presented scripts over local radio stations.

In American Medical Education Foundation, we are happy to report a grand total of \$3,866.47 was raised for our medical schools, most of this sum going to the two schools in Michigan. We feel that now our auxiliaries are aware of the Foundation and for what it stands.

Many varied programs in mental health and safety were given in nearly all auxiliaries.

Michigan is outstanding in "Health Careers." We now have 357 Future Nurse Clubs fully organized in Michigan with a membership of over 5,000 students. We are working toward one goal—to interest our young people in a *Health Career*. Our financial assistance this year comes to a grand total of \$10,410.00:

Professional nurses graduated (with our assistance)	32
Postgraduates graduated....(with our assistance)....	3
Medical students graduated (with our assistance)....	5
Practical nurses graduated....(with our assistance)....	8

These are only a few of medical activities mentioned. The greatest public relations potential that we have is working as a Full Time Citizen in our own community according to its needs. Wherever the Woman's Auxiliary President's travels took her this year in the State of Michigan, she found the same picture: the doctor's wife is a backbone of her community.

And now the fourth movement of our symphony is almost over—the Allegro. We, in our medical auxiliary work, also hope we have a triumphant ending. But like Shubert, our ending is unfinished.

Contact with Governmental Agencies

The necessary contacts with federal, state and local governmental agencies continues to be an important activity of the Michigan State Medical Society. The most significant contacts made during the past year were:

1. Michigan Day in Washington, D. C. Again, on April 30, the MSMS representatives visited Washington and made personal contacts with our friends in the Capitol and in the administrative offices of the federal

government. The resulting good will is on an ever-increasing plane.

2. The Veterans Administration "Home Town Medical Care Program" was a subject that faced The Council and its Executive Committee at all of its meetings during 1956. The crisis came in January when the Veterans Administration submitted a new contract to replace the contract in operation at the time. This contract was declared to be objectionable to representatives of the eight states and Hawaii which have utilized intermediaries successfully in the operation of the program. A new contract was developed by this group, and the Chairman (Wm. Bromme, M.D., Detroit) was named spokesman to procure an audience with Dr. W. S. Middleton, Chief of the Bureau of Medicine of the Veterans Administration and to reconcile basic differences in the contracts. At this meeting, most of the major items in our proposed contract were agreed to by Dr. Middleton and he subsequently released a press statement endorsing the Home Town Care Programs, and indicating that the Michigan Program, with its simplified reporting forms, was to be considered a model. Following this, the Veterans Administration submitted a new contract which was in most respects less satisfactory than the one presented in January, 1957. Officers of MSMS made strong direct protests to Mr. Harvey C. Higley and Dr. Middleton on May 6, 1957. MSMS Executive Committee on May 15, 1957, reiterated its opposition to supplying to the Veterans Administration lists of physicians with designation of specialists. By telegram on June 4, 1957, Veterans Administration produced a reinterpretation of its demand for these lists which was not inconsistent with the position of MSMS; other areas of variation in contract have been amended by the Veterans Administration, and a new working contract was approved by THE COUNCIL on June 20, 1957. This contract insures that veterans in Michigan—for the time being—will be given the best of medical care in their own localities. This boon was won exclusively through the efforts of the Michigan State Medical Society—without stirring the veterans and their organizations to militant action.

3. Medicare, in like manner, was a new program that demanded attention of The Council and its Executive Committee at numerous meetings. The Dependents Medical Care Act—Public Law 569—of the 84th Congress went into effect December 7, 1956. The contract was executed by Michigan State Medical Society and Michigan Medical Service (as its fiscal agent). The fee schedule for Medicare, submitted on a deadline date requiring immediate action, was that of the already-approved \$5,000.00 income contract of Michigan Medical Service. This action was indicated since, for the most part, Medicare clients fell within that income limit. The Fee schedule was printed and mailed to all MSMS members, as were information and provisions of the Directives prepared by the Department of Defense, included in the Michigan Medical Service "Physician's Manual." Additional explanations were presented at the County Secretaries Seminar last January and special material was mailed to county society officers.

Medicare is government medicine which is never satisfactory to the practicing physician. Its imperfections, soon recognized by some of our specialty groups, are being catalogued by the State Society for correction when the contract is renegotiated, which, according to priority among the states, will be March 31, 1958. All members of the Michigan State Medical Society are invited to send suggestions to MSMS to improve the Medicare program—for inclusion in the re-negotiation document.

4. Contacts with the State Executive Office in Lansing continued to be frequent and pleasant. Matters discussed were: (a) nominations for the Michigan State Board of Registration in Medicine and for the Michigan

Board of Nursing Advisory Council; (b) MSMS representation on the Governor's Study Commission on Public Health—with the MSMS statement on health and medical matters being presented to this Commission by President Arch Walls, M.D.; (c) MSMS representation on the Governor's Study Commission on Prepaid Hospital Care Plans, which in July, 1957, completed arrangements with the University of Michigan to carry on a factual, unbiased, and unprejudiced survey of prepaid medical care and insurance programs extant in Michigan; (d) MSMS opinion on health proposals which the Governor placed before the 1957 Legislature; (e) the Governor was invited to be guest speaker at the Officers' Night Dinner, during the 1957 MSMS Annual Session in Grand Rapids.

5. Liaison with the Michigan Commissioner of Health continues, with A. E. Heustis, M.D., being invited to all meetings of The Council and of its Executive Committee to report on matters of mutual interest in the field of preventive medicine. During the year The Council reiterated its policy on immunization programs: that they be *continuing* programs to include all procedures.

In 1957, MSMS opinion on health proposals to be placed before the legislature was invited by the State Health Commissioner. In this connection, The Council decided that "as a matter of policy, MSMS is opposed to increased state expenditures, caused by the inauguration of new programs on the part of state agencies, at this time." The Council recommended that present appropriations be carefully scrutinized to avoid forcing upon future legislatures programs that will require expenditures to exceed the income to be expected from the state tax structure as presently enacted.

6. Liaison with the University of Michigan was concentrated, during the past year, on the subject of hospital admissions. The policy of the University of Michigan Hospital, as presented in the November 20, 1956 letter from the Hospital Director is:

"All patients who are cared for by the University Hospital are referred to it by practicing physicians of the State and a complete case summary is sent to them at the time of discharge. Reports are not sent to anyone other than the referring physician unless so requested by the patient.

"There will be no further action on the part of the University Hospital to develop an 'interagency referral program' until we are requested to do so by the Michigan State Medical Society."

Additional suggestions, to aid relations between Michigan's practicing doctors and those in our medical centers—in referral of medically-indigent patients back to their private physicians—were made by the Liaison Committee. Two members of this Liaison Committee addressed the University Hospital residents and interns during their orientation period in July, 1957, stressing these suggestions. The Council is gratified at the co-operation it has received from the University Hospital authorities, and feels that real progress has been gained from mutual understanding.

Another progressive step with the University Hospital was the MSMS approval of the Home Visit Program of the University of Michigan Pediatrics Department, subject to approval by the county medical societies in the areas used.

7. The usual number of beneficial contacts were maintained during the past year with the Michigan Employment Security Commission, the Michigan Crippled Children Commission, Michigan State Board of Registration in Medicine, Michigan State University, Wayne State University College of Medicine, Michigan Social Welfare Commission, Michigan Department of Insurance, Michigan Fire Marshall, members of the Michigan Legislature (see paragraph on Public Relations and Legislation), and with members of the United States Congress.

Contacts with Voluntary Agencies and Organizations

1. Michigan Medical Service elected L. Fernald Foster, M.D., long-time Secretary of the Michigan State Medical Society, as its President and Medical Executive Administrator during the past year.

Michigan Medical Service is faced with most critical problems which, unless solved by the medical profession promptly, may cause this medically-sponsored social experiment to founder. If the medical profession allows Blue Shield to fall, the void will be quickly filled either by government (socialized) medicine or by union-controlled medical programs.

Increased utilization (*but no increase in medical fees*) caused Michigan Medical Service to seek an increase in rates from the Insurance Commissioner in July (the first request since 1950). This was granted.

The Council prophesies vicious blasts against Medicine, leveled primarily against the private practice of medicine, and favoring a drastic and immediate change to closed panel (salaried) practice or some variation of it under nonmedical auspices and control. The Council warns that this is a time for unselfish medical leadership—that only wise statesmanship on a high altruistic level will save the private practice of medicine as we know it. The Council begs the entire medical profession to lend its hand and heart in this crossroads crisis. No recommendation on this matter will be made by The Council until the findings of the Market Opinion Survey are available.

2. The Joint Committee with the State Bar of Michigan drafted during the last year a "Statement of Principles Governing Physicians and Lawyers" which was approved by The Council in July, 1957. Subtitles of the statement include "Medical Reports Requested by Attorneys," "Co-operation Between Physician and Attorney in Cases Expected to be Tried and Where Attorney Proposes to Present Physician as a Witness, Before Appearance in Court," "The Physician as a Witness on the Trial of the Case," "Compensation for Services of Physicians," and "Interprofessional Courtesy and Understanding." This statement will be distributed to all MSMS members and also printed in *THE JOURNAL*; it is a long step forward in better relations between lawyers and those physicians whose work brings them in frequent or occasional contact with the courts. Many productive meetings have been held at the county level between these two learned professions.

3. Favorable liaison continues to exist between MSMS and the Michigan State Nurses Association; Michigan League for Nurses; Michigan Health Council; Michigan State Pharmaceutical Association; Michigan State Medical Assistants Society; Michigan Cancer Co-ordinating Committee, including both Divisions in Michigan of the American Cancer Society; Health Insurance Counsel; World Medical Association; United Health and Welfare Fund; Michigan Farm Bureau; Citizens Public Health Advisory Committee; Michigan Hospital Association; Michigan Health Officers Association; Michigan State Veterinary Association; Michigan Heart Association; Michigan Multiple Sclerosis Center (which invited MSMS to appoint a medical advisory committee for its guidance); Michigan Hospital Service (which invited MSMS to nominate the personnel of a medical advisory committee); Michigan Psychological Association; Michigan Conference on Aging, and Cornell University Medical School (with which MSMS is co-operating in a highway accident crash survey).

4. Again The Council expresses high thanks to all MSMS members who have sacrificed valuable time and effort to act as official MSMS representatives to the many governmental and voluntary organizations which invited MSMS to name delegates to their boards and committees.

Beaumont Memorial Restoration

The Council was gratified at the quick response to its appeal that the MSMS members liquidate the indebtedness of \$9,099.29 on the Beaumont Memorial. A flood of checks was the answer—totaling \$8,544.

Negotiations are going forward with the Michigan Mackinac Island State Park Commission to place ownership of the Beaumont Memorial furnishings (personal property) in the name of the Michigan State Medical Society, in order that the different displays of Beaumontabilia, to be featured from summer to summer, are kept authentic, mobile and interesting.

Committees

A total of ninety-six meetings of committees of MSMS and of The Council were held during the past year (up to September 1, 1957).

The background of MSMS progress is the activity of our committees. Their annual reports deserve your careful perusal. The Council again expresses true gratitude to the chairmen and members of all these active committees for their great and unheralded contributions and effort given on behalf of all MSMS members—for the benefit of Michigan Medicine and the public of this State.

Annual Reports of Committees of the Council

Again to save the time of House of Delegates' Reference Committees, the Annual Reports of Committees of The Council are being integrated into the Annual Report of The Council—a pattern that proved successful during the past two years:

Committee on Arbitration.—The Committee on Arbitration attempts to advise fair, equitable and uniform fees for certain medical services rendered to patients who are being subsidized by governmental agencies. As of the present date, the Committee has had six meetings and reviewed twenty-one cases. Based on past experience, it is anticipated that about two more formal meetings will be held before the close of the current year.

Committee on Awards.—During the past year, the Committee on Awards has carefully reviewed possibilities for public recognition by the Michigan State Medical Society of outstanding work done in behalf of the health of the people of Michigan and the medical profession. As a result, we have during the past year recommended the citations noted below. The recommendations were formally approved by The Council and the awards were publicly presented.

At the Michigan Clinical Institute:

1. Eight MSMS members serving as presidents of national medical organizations: J. S. DeTar, M.D., Milan, president, American Academy of General Practice; Cameron Haight, M.D., Ann Arbor, president, American Association for Thoracic Surgery; Charles G. Johnston, M.D., Detroit, president, American Association for the Surgery of Trauma; Rupert C. L. Markoe, M.D., Detroit, president, American Academy of Tuberculosis Physicians; Edgar E. Martmer, M.D., Detroit, president, American Academy of Pediatrics; Norman F. Miller, M.D., Ann Arbor, president, American Gynecological Society; Robert L. Novy, M.D., Detroit, president, National Association of Blue Shield Medical Care Plans; and William D. Robinson, M.D., Ann Arbor, president, American Rheumatism Association.

2. Distinguished Health Service Awards were presented to four Michigan legislators: Representative Arnell Engstrom, Traverse City; Senator Clarence F. Graebner, Saginaw; Senator Perry W. Greene, Grand Rapids; and Senator Elmer R. Porter, Blissfield; also to Mr. Jay C. Ketchum, Executive Vice President and General Manager of Michigan Medical Service; Mr. John Reid, Director of Michigan Medical Service and Michigan Commissioner of Labor; and Radio Station WHAK, Rogers City.

Although not within the scope of this Committee's responsibility, the Committee nonetheless recognized with pleasure the election of Ralph C. Cook, M.D., Kalamazoo, and Joseph H. Sherk, M.D., Midland, as Michigan's Foremost Family Physicians of 1956. (Dr. Sherk was awarded the honor posthumously.) The Committee was also pleased to note the fifteen MSMS members representing 750 years of medical service who were presented with the Fifty-Year Award this year; the Biddle Lecturer, Dr. Lawrence R. Hafstad, General Motors Vice President in charge of research staff, and the Annual Beaumont Lecturer, Leon Schiff, M.D., Cincinnati, Ohio.

Committee on Study of Basic Science Act.—No changes in the Basic Science Act were made in the 1957 legislature. It remains the same as amended in 1955.

Prior to 1954 the figures issued by the Basic Science Board indicated the number of physicians, dentists and medical students in one category, osteopaths in another, chiropractors in a third, and one category was reported as unclassified. Reports of the Basic Science Board are no longer released in this manner, so that for the past three years the only figures available are the total number of applicants taking the examinations, the numbers of applicants passed and the total number of candidates certified by waiver, endorsement, reciprocity or exemption.

The Committee has been informed that the figures reported annually through the *Journal of the American Medical Association* have not been complete, so that all previous figures released by the Committee on Study of the Basic Science Act are to be disregarded.

The most accurate figures on the numbers of candidates examined, passed and certified by reciprocity, waiver, exemption or endorsement which this Committee can obtain are presented in the following table:

Year	Total Taking Examination	Total Passing (Approximate)	*Total Candidates Certified by Waiver, Reciprocity, Endorsement and Exemption
1953	600	450	—
1954	657	493	129
1955	640	480	209
1956	596	398	240
1957	361	271	100
(Feb.-March (all incomplete) examinations only)			
			Total 678

*Figures are approximate in any single year but the total certified without examination is accurate.

From the above table it is noted that a total of 678 candidates have been certified by endorsement, waiver, reciprocity or exemption from December 1, 1954 to June 11, 1957. The candidates thus certified are classified as follows:

7 chiropractors	7%
164 osteopaths	25%
507 M.D.'s	74%

This Committee has endeavored to maintain a close working relationship with the Basic Science Board and found them quite co-operative. We are hopeful of obtaining more accurate and complete figures in the future.

From the figures presented these observations seem reasonable: First: the numbers applying for examination changed relatively little in the last few years. Second: the number of candidates certified without examination has increased somewhat following the liberalization of the Basic Science Law in 1955. This was to be expected.

Third: the Basic Science Law apparently continues to be a barrier that prevents the entrance into Michigan of substandard practitioners of the healing arts.

Committees on "Big Look" and Site.—The "Big Look" Committee met on December 11, 1956, and discussed two problems.

1. The question of maintaining a well-balanced personnel at the executive office. The Committee recommended to The Council a formula for the increase of base salaries of the key personnel at 606 Townsend to be on equal footing with other state societies.

2. This Committee also looked into the possible sites for a location of our new home. To date, the Committee has not found such a site.

Committee on Blood Banks.—There have been no specific meetings of the entire Committee on Blood Banks of the Michigan State Medical Society; however, meetings have been held from time to time by several of the members pertaining to problems which arose suddenly.

The Michigan Association of Blood Banks, which was founded under the auspices of the Michigan State Medical Society and the Michigan Pathological Society, held its annual meeting in November, 1956, and a capacity crowd attended. Associated with the scientific meeting was a workshop for technicians which was held for one day. The Association is now in the process of planning a two-day workshop and scientific meeting for November of this year.

Participation in the North Central District Blood Bank Clearing House has been gratifying and the use of its facilities has tripled since last year. We feel that this is a real service to the people of the State of Michigan.

Committee on Use of the Word "Clinic."—The word "clinic" in the mind of the layman means a place for medical teaching, a place for free examination and treatment of indigents, or a place where special tests or special procedures are done because of the availability of unusual equipment or because of the banding together of a special staff of highly trained specialist physicians.

The 1956 House of Delegates Resolution No. 19 deplores the use of the word "clinic" by one and two physicians and further alleges unethical conduct by such "clinics." This Committee hastens to point out that the rules of ethics apply equally to physicians practicing in groups and if unethical practice is being done it is the job of the county medical society to take action.

However, this Committee feels that the resolution was not primarily drawn to charge unethical conduct, but rather to point up the increasing exploitation of the word "clinic" as the public has come to define it. We deplore the use of the word "clinic" when used by a doctor or doctors to describe what is actually an ordinary doctor's office. There is the implication to the public that a "clinic" practices medicine rather than the doctors who work there, and there is the added implication that broader and more specialized care is to be secured than in a doctor's office.

We have received an opinion from legal counsel stating that there is no statute in Michigan defining the use of the word "clinic" either as to size, equipment, personnel or in any other way. We must conclude, therefore, that the use of the word "clinic" by one or two physicians is neither illegal nor in itself unethical.

We believe that the use of the word "clinic" when done quite obviously to exploit a concept held by the public for business reasons should be strongly condemned by physicians. Further, we feel this fact should be publicized to the doctors of Michigan.

If the House of Delegates deems this of sufficient importance to medicine, we would recommend that they authorize the MSMS to sponsor legislation designed to define what a clinic is and what places may properly use the word in describing themselves to the public.

Committee on Courses on Medical Economics and Ethics.—The Committee met on August 10, 1956, in Ann Arbor. The minutes of this meeting were approved by the Executive Committee of The Council on August 22, 1956. The plans made at that meeting have been partly carried out, and fifteen lectures have been presented so far. Possibly one or two more will be added before the end of the year.

August 29, 1956: Mr. Eugene Wiard, Executive Secretary of the Michigan Health Council, spoke on "Physician Placement in Michigan" and pointed out the facilities which are available in bringing together a physician seeking a location and a community seeking a physician.

October 3, 1956: Dr. Milton R. Weed of Detroit again spoke on "The Relation of the Physician to Other Practitioners" in which he pointed out methods of avoiding pitfalls in intraprofessional and interprofessional relationships.

October 24, 1956: Dr. R. W. Teed filled in for Dr. Foster who was unable to be present, and discussed the subject of "Office Records."

November 14, 1956: Dr. Jackson Livesay of Flint gave a lecture on "Provincialism and Economic Royalism in Medicine."

December 5, 1956: Dr. C. Howard Ross of Ann Arbor presented a very practical discussion on the subject of "The Development of a Fee Schedule."

December 19, 1956: Dr. James Blodgett of Detroit spoke on "Self Policing of the Medical Profession," describing the measures which have been taken within the profession to improve the standards of medical practice.

January 16, 1957: Dr. V. M. Zerbi, Chairman of the Ethics Committee of the Washtenaw County Medical Society, and his entire committee held an open session of the Ethics Committee before the class. This gave the class an opportunity to see the Committee actually working.

February 20, 1957: Mr. William Burns and Mr. Hugh Brenneman discussed the public relations activities of both the Michigan State Medical Society and the AMA.

March 6, 1957: Dr. Warren Mullen of Pentwater spoke on "Starting a Medical Practice."

March 13, 1957: Dr. Lawrence A. Drolett of Lansing, Chairman of the Legislative Committee of MSMS, spoke on "The Relation of the Physician to the Legislator."

March 27, 1957: Dr. Hugh Robins spoke on "The Physician and the County Health Department." Dr. Robins is Director of the Calhoun County Health Department at Battle Creek.

April 10, 1957: Dr. William Bromme of Detroit spoke on "Medical Problems of Veterans."

April 17, 1957: Dr. Ralph Johnson of Detroit spoke on "The Art of Medicine."

May 8, 1957: Dr. L. Fernald Foster of Bay City spoke on "History, Philosophy, and Proper Utilization of Voluntary Health Insurance."

The Committee recognizes that its work has been somewhat less effective than it could have been, but there have been a number of limiting factors. The Committee has also attempted to make contact with the medical school at Wayne University, but so far these contacts have not been effective. We feel that we have made some contribution in bringing to the medical students facts in the realm of medical economics and ethics which they probably would not have secured otherwise and trust that our performance will improve in future years.

The Chairman would like also to thank all members of the Committee for their cooperation and to commend them for their aid in carrying out the program. He would like also to express gratitude to all

of the members of the MSMS and others who have cooperated in presenting the lectures.

Committee on Health and Accident Insurance Policy Control—There has been no meeting of the Insurance Committee, Michigan State Medical Society, during the past year. All pending questions have been adjudicated without committee action.

Hospital Relations Committee.—

1. *Responsibilities of Physicians and Hospitals During Disasters*: In another state legal opinion has been drafted in accordance with the laws of the state as a guide to legal responsibilities of doctors and hospitals during local disasters. Recommendation was made that similar opinions in accordance with Michigan law be secured and published by the Michigan State Medical Society and the Michigan Hospital Association.

2. *Cultists in Hospitals*: Discussion centered around the present status of certain "healing groups." Recommendation was made to the parent bodies of this Committee that the enactment of legislation specifically eliminate the public danger involved in permitting chiropractors professional access to public-supported hospitals.

Medical Procurement Advisory Committee—This Committee held no meetings during the past year, since no problems arose which called for a meeting and no references were made by officers or committees of the Society which required consideration. However, several members of the Committee have served in various capacities in medical procurement. Grover C. Penberthy, M.D., Detroit, Chairman of the Voluntary Advisory Committee to the Selective Service System and your Chairman as Medical Advisor to the Director of Selective Service of Michigan, advised on June 25 that the Doctors' Draft Law ceased on June 30, 1957. He expressed appreciation for the co-operation, interest and assistance rendered his office during the years 1950 to date of its close. He stated there is a possibility that a standby committee of some type will be continued.

Special Committee to Meet With Michigan Department of Social Welfare—There have been five meetings of this Committee with the Director of the Welfare Department and members of his staff since September, 1956. Matters referred by the Commission were studied and recommendations made. Some of the problems were: extension of coverage in the ADC category, especially in cases utilizing vocational rehabilitation; methods of using the new Federal grant for help in county hospitalization costs; reappraisal of cases involving mental disease determinations; improving the local county consultant services; and other related matters.

The Department of Social Welfare has again thanked this Committee for its valuable contributions and for its time so willingly spent.

Committee on Michigan Medical Service.—This Committee had three meetings early this year, one of which was a joint meeting with the Committee to Study Comprehensive Prepaid Insurance Plans. After thorough appraisal of the problems facing Michigan Medical Service, The Council was asked to authorize a Special Meeting of the House of Delegates, which was authorized and the meeting was held in Detroit on April 27, 1957. A perusal in detail of the Proceedings of this Special Meeting will clearly show the extent of the thought and effort put into these problems and also the fine cooperation between this Committee and members of the administrative offices of Michigan State Medical Society and Michigan Medical Service.

Liaison Committee with Michigan Medical Service—There were no matters referred to this Committee requiring its consideration during this year.

Liaison Committee to Michigan Society of Neurology and Psychiatry and the Michigan Psychological Society—The first meeting of this Committee, of the entire personnel, was held on January 2, 1957 at which time the minutes of the subcommittee of the Michigan State Medical Society Legislative Committee to meet with psychologists, dated February 3, 1954, and September 16, 1954, were reviewed, and discussed. It was moved and carried that these minutes be received for information.

The items regarding certification of psychologists from the Michigan State Medical Society Mental Health Committee minutes of November 29, 1956, were then discussed. Dr. E. Lowell Kelly distributed copies of the proposed bill along with an article reproduced from the *American Journal of Psychiatry* entitled "Psychiatry, Psychology and the New York Law." Dr. Kelly stated that a legal definition was needed so that quasi psychologists could be weeded out. After considerable discussion it was moved and carried that the joint committee meet following the January meeting of the Michigan Society of Neurology and Psychiatry for further work on the problem of certification, and the date of this next meeting was set for January 30, 1957.

At this meeting Dr. Jeffries reported that the Council of the Michigan Society of Neurology and Psychiatry had considered the proposed bill regarding the certification of psychologists and he further stated that the proposed psychologists certification bill was written in such vague terms that it is open to broad interpretations. Their concern was over the effect on the community and over the lack of safeguards. The Society, after hearing the Council's report, took a definite stand that the bill was not acceptable. However, The Council was instructed to continue working with the psychologists in an effort to reach a mutually agreeable solution. Further discussion followed at this time and it was moved and carried that a subcommittee be appointed by Chairman Bohn to study the proposed psychologists certification bill and to report recommendations to the main Committee; the subcommittee to consist of not more than three members each from the Michigan Society of Neurology and Psychiatry and the Michigan Psychological Association. The following subcommittee was appointed: Benjamin Jeffries, M.D.; P. A. Martin, M. D.; A. H. Hirschfeld, M.D.; E. L. Kelly, Ph.D.; William Knapp, Ph.D., and Mr. Alan Canty, with Dr. Jeffries as Chairman.

Dr. Jeffries forwarded a communication dated March 25, 1957, wherein he stated that since the last meeting of the Committee as a whole on January 30, the subcommittee had met on Monday, February 4 and February 14, at which time exploration of the problems relating to medical psychiatry and the proposed certification of psychologists was carried out. At the February 18 meeting it was decided to have Mr. Alan Canty and Dr. Jeffries meet to develop an agenda for further work regarding this subcommittee. Mr. Canty and Dr. Jeffries met on Thursday, March 7, and developed an agenda. The items had been studied by the members of the subcommittee and they anticipated a meeting of the total subcommittee in the next few weeks.

A communication from E. Lowell Kelly, Ph.D., dated April 1, 1957, was received, wherein he stated that in spite of several meetings the subcommittee had made very little progress in resolving the issues growing out of the proposed certification bill. He further stated that the executive council of the Michigan Psychological Association voted to introduce the bill into the legislature this year. He further stated that Mr. Canty and Dr. Jeffries had been attempting to arrange for another meeting of the subcommittee and that they were still hopeful that some agreement could be reached regarding what a certification bill can and cannot do—and then asked whether there were improvements that

could be made in the bill. Dr. Kelly also included a copy of a letter which he addressed to Mr. Philleo of Lansing in which he indicated that the Michigan Psychological Association had asked Senators Minnema and Ryan to co-sponsor the bill in the Senate and to arrange for a public hearing.

Later in April a communication was addressed to Dr. E. Lowell Kelly by Dr. Jeffries, wherein the latter stated that, since it had been decided to present the proposed bill for certification of psychologists to the legislature, it would be advisable to hold the intended conference in abeyance until they had been apprised of the pleasure of the legislature on this matter. Dr. Jeffries concluded by stating "therefore, we will look forward to picking up our agenda and continuing our work as soon as possible after this has been ascertained."

Liaison Committee with Michigan State Pharmaceutical Association—No problems have arisen during this year that required a meeting of this Committee. Some members of the Committee assisted in the clarification of a related problem involving the Michigan State Pharmaceutical Association, the State Board of Pharmacy, the Michigan State Nurses Association, and Michigan Hospital Association.

Liaison Committee with Michigan Veterans Organizations—Up to the time of preparation of this report, no meeting of the Committee had been called. The Chairman kept the group of service officers of the four veterans service organizations up to date with problems deriving from renegotiating the contract for the Home Town Care Program in the event that their assistance would be necessary. (See Contact with Governmental Agencies. Item 2)

Committee on National Defense—It is with a great deal of sorrow that the Committee on National Defense reports the passing of its long-time Chairman, Dr. William H. Gordon, on May 5, 1957.

Dr. Gordon was an active chairman who stimulated all of us with his keen interest in the problems of civil defense and the necessity for statewide interest in the development of planning. We shall miss his guiding hand.

The Committee met at regular intervals throughout the year, one of the meetings being held jointly with Rural Medical Service Committee. At each of the meetings there were reports from representatives of the various professional groups of the state concerning the status of activity in which they were engaged. Representatives of the Michigan Department of Health, the Michigan State Office of Civil Defense, and the Detroit Office of Civil Defense kept the Committee informed of their progress.

The Committee accepted and approved "Standing Orders for Nurses in Mass Disaster" which was prepared for the Health Division of the Detroit Office of Civil Defense by a joint committee made up of physicians, nurses and hospital administrators, under the chairmanship of Dr. Joseph Witter.

It was reported that training material for dentists as well as for nonprofessional volunteers, which had been developed by the Health Officer of the Detroit Office of Civil Defense and approved by this Committee, had been requested by civil defense organizations and dental associations in eighteen states. Requests were also received from many dental schools, military organizations and other groups. It was reported that this training material is being used very successfully in Detroit and other cities in the State.

The Committee feels that it is imperative that all physicians throughout the State be aware of planning and their responsibilities in the care of casualties. This applies to incidents which might occur locally as well as mass disaster. Further, the Committee feels that all

physicians should participate in the training of other professional groups and nonprofessional volunteers in casualty care as well as planning. Mass disaster is no longer a local problem but one which involves an entire state, if not a region. With the existence of thermonuclear devices current planning must be developed on a statewide basis using every resource and potential of the entire state.

Committee to Study Package Arrangements Between County Medical Societies and Local Welfare Departments.—

Last November the Committee on Study of Welfare Package Arrangements mailed questionnaires to all county medical societies in the State. The response was very prompt and quite surprising, as replies were received from fifty-four county medical societies. Only one county of the State Medical Society failed to report. Perhaps the response received is some indication of the importance placed upon this matter by the component medical societies.

The questionnaire on the medical care of welfare cases consisted of seven items, most of which were answered by the county medical society concerned. Questions and answers are listed below:

1. *Does your county medical society have any agreement for the medical care of welfare cases?*

Forty-nine county societies answered this question in the affirmative and six counties indicated that they had no agreement for the medical care of welfare cases. Twenty-four societies indicated that they were using the Uniform Fee Schedule for Governmental Agencies as a basis for their agreement, four used a Crippled Children's fee schedule, and eighteen based their agreement on a local schedule. The balance apparently made no report.

2. *If the agreement is based on the Uniform Fee Schedule for Governmental Agencies or that of the Michigan Crippled Children Commission, does your county society plan have any variations therefrom?*

Seventeen counties indicated their agreement as being based upon the Uniform Fee Schedule for Governmental Agencies; twenty-two stated no; sixteen made no comment. It is necessary to tabulate the comments made under this heading as follows:

- a. One society used the Blue Cross-Blue Shield plan entirely.
- b. Muskegon changed to Uniform Fee Schedule March 1, 1957.
- c. Two societies indicated some variation in arrangement for complicated cases.
- d. Four societies used the Blue Cross fee schedule for the \$2,500 bracket.
- e. Another society indicated Social Welfare pays 75 per cent of the amount listed in the Uniform Fee Schedule, the maximum being \$85.
- f. Shiawassee County reports that the fees are paid to the hospital staff fund which in turn is used for laboratory, library and other expenses of the staff. For children, the Crippled Children Commission fee schedule is used.
- g. One county reports an agreement of house calls at \$5 to \$7, based on hours and holidays; hospital calls \$3.
- h. Another society reports 50 per cent reduction in fees for hospitalized OAA patients.
- i. One county has an annual contract with the Social Welfare Department for the payment of \$10,000 to the medical society which covers the care of all welfare cases.

- j. Another agreement covers \$3 daily for the first fourteen days for medical cases and then \$1.70 per visit; \$200 maximum for a hospital patient; no pay for EKG on a hospital patient.
- k. Another variation is the Uniform Fee Schedule for surgery, a local plan for medical cases which covers four calls the first week, two calls through each week thereafter.
- l. Another variation: the medical cases are paid on the Michigan Crippled Children Commission fee basis.
- m. Another county uses the Michigan Crippled Children Commission fee schedule, with the surgical fees higher in some cases and lower in other cases.
- n. One county pays 65 per cent of the fee schedule but does not state the fee schedule used.

3. *What are the salient features of the local agreement, if one is used?*

In many cases this particular question was not answered. We received twelve affirmative answers, ten negative answers, and no answer at all in thirteen cases, a total of thirty-five. It is interesting to note the variation in answers made on this question. They may be tabulated briefly as follows:

- a. County pays to doctor as agreed, hospitalization authorized, keep costs down.
- b. Set fee for home, office, major surgery.
- c. Monies paid to county society (2).
- d. Blue Cross \$2,500 rate (4).
- e. Based somewhat on Uniform Schedule (1).
- f. Practitioner submits prevailing fee for service (1).
- g. Approved by local filter board (1).
- h. Specialists' fees about \$100, varies (1).
- i. Patient referred to Welfare Department; no uniform fee; decided by Welfare Department (1).
- j. County employs two physicians on salary (2).
- k. Lower than Michigan Uniform Fee Schedule until revised (1).
- l. Salaried county doctor; health officer O.K.'s other bills.

4. *Does your county society have an agreement with the county or city for the hospitalization of welfare patients?*

Thirty-five societies answered this in the affirmative, and nineteen stated that they had no agreement for the hospitalization of welfare patients.

A second part of this question asked: *To whom were the fees for the medical care of hospitalized welfare patients paid?*

Thirty-three societies answered that the fees were paid to the attending physicians; five state the fees as being paid to the county medical society, and three gave other methods of payment. Many societies did not answer this part of the questionnaire. The comments made under this heading follow:

- a. Usually whatever the Welfare Director will give; ignores the agreement usually (1).
- b. M. D. is paid by the county welfare officer on a schedule agreed between the county medical society and the Board of Supervisors (1).
- c. Trust fund to be used to finance hospital externships (1).
- d. Each case considered as it arrives (2).
- e. Accept hospital rates, Blue Cross? (1).
- f. Through county society (1).

- g. Doctor bills Social Welfare Department (1).
- h. Surgical fee to doctor; attending doctor for medical cases (1).
- i. Hospital paid directly; doctor is paid \$2 a visit (1).
- j. Based on Michigan Medical Service (1).
- k. Acute cases paid to attending M.D. (1).

5. *Does the society have an agreement for the home and office calls for welfare patients?*

Thirty-seven societies answered in the affirmative, sixteen in the negative. In general, throughout the counties reporting, the majority of home day calls are paid for at the rate of \$3 to \$4 as the following figures will indicate:

Home Calls	Day	Night
	\$2 (with mileage 1 way) 2	
	\$3.00.....16	\$3.00..... 5
	\$3.50..... 1	
	\$4.00.....12	\$4.00..... 5
	\$5.00..... 7	\$4.50..... 1
		\$5.00.....19
		\$6.00..... 2
		\$7.00..... 3

Office Calls

\$1.50..... 1
\$2.00.....18
\$2.50..... 1
\$3.00.....16
No set fee..... 1

6. *How old is your county society agreement? If it has been revised, indicate date.*

The answers were about as follows:

Several years	1
Ancient	1
1 year	9
2 years	3
3 years	2
4 years	8
6 years	4
8 years	11
9 years	1
10 years	4
14 years	1
15 years	2
18 years	1
20 years	1
22 years	2
23 years	1

(no answer from eleven societies)

Only a few societies indicated that their agreements had been revised recently.

7. *Is there any provision for care of "medically indigent" cases? Give a brief explanation if the answer is yes.*

Thirty-nine county societies indicated in the affirmative that there was an agreement of this nature; fifteen answered in the negative. A great variety of answers was received to this question.

- a. No standard procedure (1).
- b. Cared for in the county infirmary (8).
- c. Doctors take care of them gratis.
- d. Paid by county; patient signs agreement to repay county where able (3); patient signs agreement to repay county when able (16).
- e. Treated on local fee schedule after calling Welfare Department (3).
- f. Included in sum paid by county (1).
- g. Bills sent to county welfare department (11).
- h. One county comments as follows: "many are referred to convalescent homes and the supervisors' board feels a hospital would be financed at a cheaper rate with better supervision and control of patient, physician and welfare department."

- i. County or state aid, or else an agreement with the attending doctor to lower or cancel his fee (1).
 - j. Hospital cases by physicians employed by county; home calls paid by welfare society and fees established by them (1).
 - k. Arranged with individual physicians (1).
 - l. Screened by welfare agency and treated locally or at University Hospital (1).
 - m. Through the county bureau of social aid; refers to notice in the Washtenaw County Medical Society Bulletin of May 1956 (?)
 - n. A three-county society feels choice of physicians is being taken away from patients.
 - o. One tri-county society feels there is discrimination.
8. At the bottom of the questionnaire, the societies were asked to make any comments they cared to for the benefit of the Michigan State Medical Society. Not all answered this question, but so variable are the comments that it seems best to list them as they were received:

Allegan: We are well satisfied as the agreement is the same as the Michigan Medical Service pays.

Clinton: Excellent relations with county welfare commission; if met halfway, they cooperate well with us.

Chippewa, Mackinac: Many items are unsatisfactory, as follows: (a) Welfare director insists on patient making personal visit for authorization; this is unreasonable as the patient may be too ill; (b) authorization for hospital care dates only from the completion of the investigation.

Genesee: Our contract is up for revision; we have a backlog of \$75,000 for services over and beyond the \$10,000 limit of our contract.

Dickinson, Iron: (a) Difficulty with welfare department administration; and (b) inequality of payments by Michigan Crippled Children Commission with their standard fees for service.

Ingham: "Excellent"

Barry: "Accept Blue Cross \$2,500 rate. The further comment was made that this plan was first called to my attention by this form, since Welfare was called and the director stated the above had been followed for the past four to five years and she had never changed it nor did she intend to."

Jackson: "We like this—we pay our own men to run a screening panel on the necessity for the treatment requested and we also pay an auditing committee (at \$10 per hour) to check the bills."

Kent: "Crippled Children's and Vocational Rehabilitation patients are cared for according to the appropriate or specific fee schedule and payment is to the physician directly."

Lapeer: "Lapeer County Convalescent Hospital for chronically ill patients hires a private physician on contract. Patients not cared for here or at Lapeer County General Hospital are cared for by private physicians on fee basis."

Lenawee: "Fees too low now; planning revision."

Macomb: "Being a very busy suburban area, doctors have cooperated well with County Board."

Marquette: "We feel we get along well with the County Welfare people. Plan has worked to mutual satisfaction."

Midland: Hardy Cancer Fund and Midland County Crippled Children's. Want provision for ADC other than emergency and want indigent dental care.

Monroe: "Unwritten agreement that welfare cases will be treated in the hospital without charge by the physician (hospital gets paid for its services). We would be anxious for an official recommendation by MSMS which would be an excuse for opening discussions with County Commissioner."

Northern Michigan: "This was discussed at our last

meeting. There is feeling there should be some uniformity in charges and services. One county apparently goes by the Michigan Crippled Children Commission's fees, another by the Blue Book, others by an inter-county agreement social welfare directors set up in the 1930's."

Newaygo: "A meeting has been arranged with county supervisors' committee for January 1957 in attempt to iron out some of the many problems and arrange a standard procedure as well as a standard fee schedule. Previous meeting not too successful; however, probably because the county monies appropriated to the Welfare Committee are inadequate."

Ottawa: County refers crippled children to commission and doctors not satisfied.

St. Clair: County should assume care and responsibility of medically indigent.

Sanilac: The physician may lose contact with patient when he is transferred from one hospital to a convalescent home due to distance and no facilities for transportation to physician's office for periodic examinations.

Shiawasee: Hospital has agreement with County and Welfare Agency.

Van Buren: "We have been running a pretty vicious and nasty battle for about two years with county welfare people and making some progress, but problem is not settled. We have an urgent labor problem here also."

Washtenaw: "Through Bureau of Social Aid. The Washtenaw County Medical Society has on previous occasions made attempts to cooperate with the Board of Supervisors, but agreements have never been established."

Wayne: "In 1946 a special committee of the Wayne Society tried to get Detroit and Wayne Welfare Boards to adopt Michigan Uniform Schedule but the boards adopted the schedule in principle but cut rates approximately one-third. This was not acceptable to our Society and no agreement was made."

A study of these reports reveals that all component societies do not have satisfactory agreements with their county welfare agencies for the care of governmental wards, and that doctors of medicine are being penalized by being requested to perform services at considerable loss to themselves. It seems advisable that a uniform agreement for the care of welfare cases should be prepared as a guide for the use of our component societies. It is recommended that the material from this survey be made available to the Permanent Advisory Committee on Fees and that this Committee be invited to develop such an agreement as a guide for our component societies.

Committee to Study Periodic Health Examinations in Hospitals.—There has been no meeting of this Committee in 1956-57. So far as is known, eight hospitals in Michigan conduct these examinations for persons other than their own employees.

The Committee would welcome suggestions as to any action that should be taken.

Permanent Conference Committee with Michigan Hospital Association, Michigan League for Nursing, and Michigan State Nurses Association.—Regular meetings have been held throughout the year which have been well attended by all component groups. The more important subjects discussed were as follows: Joint Conference on Rehabilitation, record librarians, economic security program for nurses, legislation re hospital pharmacies, practical nurse problems, nurse recruitment, nursing care in disaster situations, legislation concerning all three groups, nurse registration, and personnel policies in hospitals.

All component groups realize the benefit that accrues to all of us through discussions such as these. There is a much better understanding of each others problems and it leads to better and closer cooperation.

Committee on Rural Medical Service.—The Rural Medical Service Committee found itself concerned with two primary objectives during this past year:

1. The continuing need for consultation concerning M.D. Placement Program. In connection with advising the Michigan Health Council concerning its function, a new field has been considered to further implement the Placement Program, namely, the development of plans for rural medical centers. These centers would be variable in need and size and study has been going forward with Mr. Jack Kantner concerning the development of an outline for these medical facilities.

2. Considerable effort has been directed toward the planning of national defense and mass casualty programs as especially applicable to the rural areas. A joint meeting was held with the National Defense Committee in October, 1956, at which time the mutual aspects of civil defense were discussed between the urban and rural community levels. It is the feeling of this Committee that much needs to be done in the immediate future properly to organize the rural areas and their existing facilities, such as cataloguing equipment available, et cetera, and to develop plans for handling mass evacuation of casualties from the urban areas in the event of a catastrophe.

Committee to Meet with University of Michigan.—On November 19, 1956, your Committee met with President Harlan Hatcher, A. C. Furstenberg, M.D., A. C. Kerlikowske, M.D., and M. L. Niehuss representing the University.

The question of handling medically indigent patients released from the University of Michigan Hospital was referred to a subcommittee for study.

The problem of press releases from the University was referred to Drs. Furstenberg and Kerlikowske and Mr. Niehuss for coordination with public relations director, Mr. Allen Davis.

The House of Delegates resolution re Department of General Practice in Medical Schools was discussed and referred to Dr. Furstenberg for possible implementation if feasible.

Dr. Furstenberg accepted the invitation of the House of Delegates to send representatives of the third and fourth year classes to the House of Delegates in Grand Rapids in September, 1957.

The subcommittee subsequently met with Roger Nelson, M.D., Associate Director of the University Hospital and developed a plan of action on release of patients which should correct misunderstandings.

The Committee advanced and Dr. Nelson accepted the suggestion that two practicing representatives of the Society speak to the House Staff of the University Hospital during their orientation program of July 2, 1957, and this has been implemented.

Legal Matters

1. Legal action of William A. Kopprasch, M.D., Allegan, against the Michigan State Medical Society, the Allegan County Medical Society, et al. This effort of Dr. Kopprasch to force entrance into the Allegan Health Center of Allegan has been in the Circuit Court since January 13, 1955. On March 27, 1957, a four-hour pre-trial conference with the judge and counsel for all parties was held in Allegan at which time the judge urged plaintiff's attorneys to drop their damage and conspiracy claims and confine the litigation to the simple issues as to whether legally the Allegan Health Center could bar Dr. Kopprasch from use of the Hospital's facilities. Depositions were taken in Lansing on May 7 by plaintiff's attorney.

2. MSMS Legal Counsel Lester P. Dodd, Detroit, rendered numerous legal opinions on questions facing the State Society as a whole and inquiries proffered by individual members on topics that affected the well-being of all members.

Matters Referred to the Council by 1956 House of Delegates

1. A Committee on Uniform Fee Schedule for Governmental Agencies was appointed, following instruction of the 1956 House of Delegates, and is now in the arduous process of studying necessary revisions in this Fee Schedule. This is not an easy task, entailing as it does contacts with all interested specialty groups and affected medical organizations.

2. *Resolutions re Comprehensive Prepaid Medical Care Insurance Plans:* the Committee to Study Comprehensive Prepaid Insurance Plans was created and held numerous meetings with interested and informational groups; the report of this Committee will be presented to the House of Delegates in September, as per instruction.

3. *Resolution to include Michigan Medical Service Annual Report in the Handbook for Delegates* has been complied with.

4. *Resolution re practice of psychotherapy being the practice of medicine:* after an amendment recommended by Legal Counsel, copies of this resolution were sent to the Governor, the Attorney General, and all county society officers. The eventual answer of Attorney General Thomas M. Kavanagh indicated that the thinking of the House of Delegates had not swayed him from his original opinion.

5. *Resolution re plan for expediting work of House of Delegates:* two improvements will be inaugurated at the 1957 Session: the use of the Vu-Lite to permit all resolutions to be thrown *in toto* upon the screen as they are being discussed; and a special printed form (in quadruplicate) for all resolutions.

6. *Resolution re continuation of Councilor Conferences:* this order has been fulfilled.

7. *Resolution re expansion of medical school facilities at Wayne State University:* letters have been written to the Governor, the Lieutenant Governor (as presiding officer of the Senate) and the Speaker of the House of Representatives, urging accomplishment of this resolution. A proposal to add to the budget of Wayne State University the sum of \$285,650 for expansion of teaching personnel to provide for fifty extra medical students was introduced, but not adopted by the legislature.

8. *Resolution re establishment of Department of General Practice in Medical Schools:* this request was forwarded to the presidents of the universities and the deans of the two medical schools in Michigan. In addition, the resolution was discussed at the November 19 meeting of the MSMS Committee to meet with the University of Michigan, at which time Dean A. C. Furstenberg, M.D., explained that this had already been presented before the Executive Committee of the Medical School. Dean Furstenberg stated that already there is much teaching being done to accomplish the aims of the resolution.

Dean Gordon H. Scott of Wayne State University Medical School advised as follows: "Department of General Practice Concept is being given careful study by our faculty. We are not sure at this time that establishment of a department is the answer to the problem of the generalist. Our entire curriculum is in the process of being revised and we propose no action on this question now."

9. *Resolutions re discipline of members:* during the past year the MSMS Committee on Mediation, Ethics and Grievance sought the guidance and recommendations of all county medical societies. The important report of this Committee, to appear in the Supplemental Report of The Council, is invited to the special attention of all House of Delegates members.

10. *Resolution re Committee to Study Use of Word "Clinic":* the special committee was advised by Legal Counsel that there is no legal statute regarding the word "clinic," so the Committee could consider any

ethical problem involved. The Committee's report is published above, among Committee Reports.

11. *Resolution re new MSMS Headquarters*: last year, the House instructed that a new MSMS Headquarters be built and equipped and "that, for the building of this new headquarters, the sum of \$300,000 be raised by (1) the sale (at the proper time) of our present headquarters; (2) by the use of present building reserves; and (3) by the increasing of dues in the amount of \$5.00 per year, beginning in the 1957 fiscal year, said increase in dues to be used only for the purpose of defraying the cost of building and equipping a new MSMS Headquarters." The "Big Look" and Site Committees have been busy and will report their up-to-date findings in the Supplemental Report of The Council.

The Council feels that the sooner this building is erected, the more money can be saved in a sharply rising commodity market. We need money *now* to save money. In order to have sufficient funds, therefore, to begin early building operations, it was recommended by the Finance Committee and approved by The Council on July 12, 1957 that, *for one year only*, the dues for the year 1958 be increased \$50.00 per member—the proceeds to be used exclusively for the MSMS building fund.

12. *Resolution re Regulation of Ambulance Operation*: this was referred to the MSMS Committee on Study of Prevention of Highway Accidents, which sponsored a release to all newspapers in addition to the news coverage at the Annual Session. Law enforcement officials and official agencies were contacted as well as the Michigan Funeral Directors Association.

13. *Resolution re Adequate Funds to Carry Out Civil Defense*: this was referred to the MSMS Legislative Committee which supported legislative action for this purpose. The Civil Defense department requested \$20,000-plus this year for "Medical Civil Defense Co-ordination and Training." It was not granted by an economy-bent legislature.

14. *Resolution re Permanent Advisory Committee on Fees*: this was referred to the Speaker who appointed the following committee: G. C. Penberthy, M.D., Detroit, Chairman; J. F. Beer, M.D., St. Clair; M. A. Darling, M.D., Detroit; H. F. Falls, M.D., Ann Arbor; W. M. LeFevre, M.D., Muskegon; and M. L. Lichter, M.D., Detroit.

15. *Resolution Urging Total Participation of M.D.'s in Michigan Medical Service*: this was accomplished in several ways: (a) a letter was sent to all county society officers; (b) numerous articles in JMSMS; (c) the County Secretaries Seminar last January devoted two days to the need for total understanding in and co-operation of all M.D.'s with Michigan Medical Service; (d) the publicity resulting from the April 27 Special Session of the MSMS House of Delegates (see above report on MSMS Market-Opinion Study and the portion covering M.D.'s).

16. *Resolution re Annual Registration of M.D.'s* (disapproved by 1956 House of Delegates): the 1957 Legislature tabled H.B. 515, which called for a \$10.00 annual registration fee from doctors of medicine, to allow the matter to be amicably settled "out of court." The Council referred this matter to the Legislative Committee which will offer the following resolution for the consideration of the 1957 House of Delegates:

"Whereas, the bulk of the revenue which the Legislature appropriates to the Board of Registration in Medicine is derived from the original (\$50.00-plus) license fees collected from new doctors entering practice, and

"Whereas, some of the burden on these new doctors should be assumed by their colleagues now in practice, and

"Whereas, it is evident that some new sources of operating revenue must be found for the Board if it is to properly serve the profession and the people of this state, therefore be it

"RESOLVED: That this House of Delegates respectfully requests the Board of Registration in Medicine and appropriate Legislators to review with The Council or its Executive Committee the existing and projected programs and fiscal policies of the Board to enable The Council to recommend changes in the Medical Practice Act which will effect some relief to the new M.D.'s and provide adequate funds for the Board's duties; and be it further

"RESOLVED: That if such legislative changes must necessarily embody a form of annual licensure of M.D.'s that this House of Delegates endorses a fee of five dollars."

A recommendation on this subject follows.

17. *Resolution re inviting medical student representatives to attend House of Delegates Session*: this has been accomplished.

18. *Resolution re Committee to Study Use of Excess Beds in Tuberculosis Sanatoria*: the report of the Committee on this subject was as follows:

"RESOLVED THAT . . .

"A. This Committee recognizes that there is a continual decline in the tuberculosis hospitalization requirements in the State of Michigan. On the other hand, this Committee feels that there are many persons with active tuberculosis who are not hospitalized. That, if we can influence the State Legislature to enact an adequate law for the management of recalcitrant patients, many of the beds might be filled.

"B. The Committee endorses the following recommendations to strengthen the economic position of the state tuberculosis hospitals by:

"(1) Requiring that State-at-large patients shall be hospitalized at a State sanatorium whenever bed space is available;

"(2) Directing that veterans meeting county residence requirements shall be treated as county charge patients, rather than as State-at-large patients; and that veterans who have not established residence continue to be provided hospitalization at State expense;

"(3) Providing that selected tuberculosis patients in mental hospitals may be transferred to state tuberculosis hospitals as State-at-large patients when, in the opinion of the medical directors of mental and tuberculosis hospitals, the transfer will be in the patient's best interest;

"(4) Providing that selected corrections department prisoners with tuberculosis may be transferred to the State tuberculosis hospitals as State-at-large patients when in the opinion of the director of said department and the director of the State tuberculosis hospital, the transfer will be in the best interest of the patient and the public;

"(5) Establishing an effective security unit at a State tuberculosis sanatorium and requiring that all patients committed by court order be isolated and treated in this unit or in a county tuberculosis sanatorium, if practicable.

"C. Action should be taken to provide for the adjustment of tuberculosis care provisions to patient needs by:

"(1) Directing that the State Health Commissioner, with the concurrence of the State Council of Health, may declare a sanatorium or any portion of a sanatorium to be in excess of reasonable tuberculosis hospitalization needs of any area, and that on this basis, the Commissioner may

"(a) Withhold state subsidy from any sanatorium so designated, or

"(b) Reduce the number of beds approved for subsidy, making a proportionate reduction in the allowable per diem costs for any patients hospitalized at State expense.

"(2) Stipulating that when State action results in the closing or reduced operation of a sanatorium, funds be provided by the Legislature to maintain diagnostic and out-patient services for the tuberculosis in the area concerned.

"The Chairman asked for and received a vote of approval by the Committee for each separate action of the above resolution.

"The giving to counties and cities the authority to use excess sanatorium beds or sanatoria for other purposes, met with a variance of opinion by members of the Committee. Following discussion,

"MOTION: that we give counties and cities the authority to use sanatorium beds or sanatoria for the care of tuberculosis or other public health responsibilities, such as our mentally ill, our indigent, our alcoholic and our tuberculosis patients in State prisons; carried."

19. Resolution re Uniform Autopsy Code: the draft of this Code has been approved by The Council and is attached herewith as addendum.

Recommendations

1. That The Council be authorized to send MSMS representatives to Washington, D. C., in 1958 on the occasion of the annual Michigan Day, as recommended by last year's House of Delegates.

2. That serious consideration be given to the recommendations of the Committee on Mediation, Ethics and Grievance.

3. That the Legislative Committee's Resolution re Licensure of Doctors of Medicine be approved.

4. That The Council recommends that the Michigan State Medical Society dues for 1958—for one year only—be increased \$50.00 to raise sufficient funds to start the MSMS building as soon as possible.

Respectfully submitted,

THE COUNCIL

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Immediate Past

President

Addendum

CODE OF PROCEDURES AND ETHICS RELATING TO AUTOPSIES

Purpose.—The performance of autopsies is essential to the welfare and protection of the public and to the advancement of medical science. All who are concerned with the performance of the autopsy must serve the interest of the relatives or friends of the deceased with respect to the care of the body. In connection with the autopsy, therefore, the hospital, the pathologist, and the funeral director agree to discharge their responsibilities on the highest professional standards, and to promote mutual trust, confidence, and good will.

Toward this end, the present Code has been arranged by agreement between the Michigan Funeral Directors Association, the Michigan Hospital Association, the Michigan Pathological Society and the Michigan State Medical Society.

Responsibilities of the hospital:

Preparation of the body.—In the preparation of the body, the head and shoulders should be elevated to prevent postmortem lividity in these exposed parts. The arms should be crossed over the trunk and held by cotton-padded strips of gauze, above the elbows but not at the wrists. The eyes should be closed but nothing should be placed under the eyelids. The mouth should not be closed. (Strips of gauze used for this purpose leave objectionable marks.) Surgical dressing should be left in place. The body should be covered but not wrapped and when possible kept refrigerated at 38 to 40° F.

Interest of hospital in autopsies.—The autopsy is performed as a public service and in the interest of science. It represents a considerable cost to the hospital.

Permission for autopsy.—Permission should be secured with the least practicable delay. A suitable legal form should be used and properly witnessed, a copy of which shall be made available to the person granting permission. In general, a complete autopsy includes examination of the brain and organs of the neck, as well as the contents of the thoracic, abdominal and pelvic cavities. In requesting permission for autopsy, the nature and the extent of the autopsy should not be misrepresented; the hospital staff shall not use coercion or threaten to designate the death as a "coroner's or medical examiner's case," or refuse to sign the death certificate, if the cause of death is known.

Notification.—The hospital administration should notify the pathologist as soon as the autopsy permit is signed. As soon as the hospital learns the name of the funeral director, the hospital shall notify him that an autopsy is to be performed and that the body will be ready for delivery at a specified time. In order to obviate any inconvenience to the family of the deceased

and in order to facilitate the funeral arrangements, it is essential that every effort be made to expedite the autopsy and permit the body to be delivered to the funeral director with a minimum of delay.

Every effort should be made for the prompt completion of the death certificate or transit-permit.

When a promise has been made to relatives that they will be informed of the autopsy findings, the person making the promise should notify the pathologist of the name and address of the family physician or attending physician to whom the findings should be mailed. This physician will then be in a proper position to interpret the clinical manifestation of disease in the light of the autopsy findings.

Responsibilities of the funeral director.—The funeral director (and embalmer) recognizes that his work is usually simplified in a body following a properly performed autopsy.

The funeral director (or embalmer) shall co-operate in every way with the hospital in requesting permission for autopsy; he shall assist the hospital in locating relatives in order to obtain permission for autopsy. It shall be deemed improper for a funeral director (or embalmer), by any manner or by implication, to dissuade the family from granting permission for an autopsy or to influence the family to change its mind after permission has been given.

It shall be considered unethical for a funeral director or embalmer to make an extra charge to the family for preparation of a body following autopsy.

In order to correct misunderstanding or prevent possible criticism from any source, it is understood that the funeral director and the pathologist will communicate with each other at once if any question is raised in connection with the performance of an autopsy.

The funeral director should telephone the hospital to inquire when the autopsy will be completed, rather than call or have his attendant call at the hospital, without notice, to remove the body.

As a convenience to the family and as a courtesy to the pathologist, the funeral director, upon receipt of legal form granting consent for autopsy, will permit autopsies to be performed in the funeral home.

Responsibilities of the pathologist.—The autopsy shall be performed and the body made ready for delivery to the funeral director with the least practicable delay.

In some instances arterial embalming may be permitted (in the autopsy room, morgue, funeral parlor), before autopsy. In general, however, such embalming interferes with the proper performance of the autopsy, as in septicemia, bacterial endocarditis, or suspected poisoning since there may be no way of knowing in advance if any of these conditions are present.

If delay is anticipated by the pathologist in performance of the autopsy, the funeral director should be notified so that the time of delivery of the body to the funeral director will be mutually satisfactory. If permission for autopsy is obtained after 4:30 p.m.: the body should be ready for delivery by 11:00 a.m. of the next day; if permission for autopsy is obtained by 10:00 a.m., the body should be ready for delivery by 2:00 p.m. of the same day; if consent is obtained between 10:00 a.m. and 4:30 p.m. the body should be ready for delivery within six hours. It is obvious that the permission for autopsy must be delivered to the pathologist immediately after it has been obtained.

If any unusual procedure is found necessary for the proper performance of the autopsy, which may interfere with the work of the embalmer, the pathologist shall attach a note to the body or telephone the funeral director to explain the need for the procedure.

The pathologist should transmit his findings of the cause of death to the attending physician or responsible hospital medical officer as soon as possible to facilitate prompt completion of the death certificate or transit-permit.

Mutual responsibilities.—All hospitals, pathologists, and funeral directors (and embalmers) shall periodically instruct all members of their staffs, employees, or agents who are concerned with these recommendations to enable them to carry out these provisions intelligently and efficiently. (In hospitals, this personnel will include administrative and office employees, nursing and medical staff, telephone operators, orderlies, and morgue attendants.) A copy of these provisions shall be posted in a conspicuous location or made available to the personnel concerned.

This Code shall be incorporated in the curriculum of all schools of embalming, mortuary science, medicine and nursing in the State of Michigan.

Recommended procedures in autopsy.—A "Y" incision is recommended for routine use, both in males and females. In females, the incision should be made below the breasts along the normal folds, and should not extend laterally beyond the anterior axillary lines.

Should it be necessary to turn the body over in examining the spinal column, the forehead should be placed on a support sufficiently high to prevent the face from touching any surface. The entire face, and particularly that portion of the forehead resting against the support, should be protected with a heavy cotton pack.

In cranial examination special care should be taken to preserve the normal facial features. A transverse incision in the scalp should be made from behind one ear, across the vertex (*but not anterior to it*), and to a point behind the other ear. In the removal of the calvarium, the temporal muscles should not be excised; instead, a single horizontal cut should be made through the thickest portion of each muscle and the incised portions bluntly reflected toward the cephalic and caudal attachments. The lines of sawing of the calvarium should be arranged to avoid over-riding by the replace bone. One recommended procedure is to saw the occipital bone as far posteriorly as possible, leaving an inverted V-shaped or square projection on the remaining portion of the bone. Laterally the excised calvarium in the region of the mastoid process of each temporal bone should form an obtuse angle. If autopsy is performed prior to arterial embalming, the ends of the internal carotid and vertebral arteries should be left as long as possible and ligated prior to removal of the brain. Unless other arrangements are agreed upon locally for restoration of the cranial cavity, the latter should be left open. A few sutures in the scalp will hold the skull cap in place temporarily.

The nature of the autopsy will determine the extent of the examination. In general, certain precautions should be followed:

1. Incision in the posterior or lateral abdominal or thoracic wall should be avoided.

2. Surgical incisions near the midline should be utilized as far as possible.

3. The breast plate should not be removed partially or retracted against the face. It should be disarticulated at its clavicular junctions and be removed completely. At the end of the autopsy it should be replaced.

4. Long stumps and long ligatures should be left on the main arteries arising from the arch of the aorta. If tissue is to be removed from the neck regions for examination, the carotid and subclavian arteries should remain intact and major branches should be tied. If the trachea and larynx are to be removed, the superior thyroid arteries should be ligated close to the external carotid arteries.

5. The external iliac arteries should not be ligated but long stumps should be left so that they may be used for injection in embalming the interior portions of the body. The internal iliac arteries should not be removed unless necessary.

6. If it is desired to remove a section of an artery of an extremity, the artery should be ligated beyond

the cut ends prior to removing the section, unless the body has been previously embalmed.

7. The testes should be removed through the inguinal canals.

8. In removing the rectum, the anal stump should be ligated and care should be taken not to cut the rectum too close to the anus. The pelvic floor should not be cut.

9. If the entire uterus is removed, the vaginal canal should be closed by properly placed "purse-string" sutures, best applied externally.

10. As far as possible, all fluid shall be removed from the body cavities.

11. Depending upon local preference and agreement, after examination the organs may be inserted within plastic bags and placed within the body cavity, and the main incision then approximated with a running suture.

12. Tissues such as corneas, eyes, skin, bones, and blood vessels which are to be used for special purposes, other than for pathologic examination, shall be retained by the pathologist or the hospital, providing special permission has been obtained. The embalmer should appreciate that the removal of some tissues, such as skin, may pose an additional problem for him.

Adjustment of Complaints.—If any violation of this Code occurs, an effort to adjust the differences should be made promptly by the funeral director, the pathologist and the hospital concerned, or by a local co-ordinating committee appointed for this specific purpose.

If agreement is not reached through such efforts, the violation may be referred to the State Committee on Autopsies. This committee should be selected annually and should be composed of one member selected by each of the following organizations: Michigan Funeral Directors Association, Michigan Hospital Association, Michigan Pathological Society, and Michigan State Medical Society. All complaints should be submitted to this committee in writing. Decisions and recommendations made by the committee with respect to complaints considered by the committee should be transmitted to the organization concerned for appropriate action. Should a member of the committee be involved in a dispute and such dispute be referred to the committee for investigation, an alternate member should be selected from the organization which he represents to take his place temporarily on the committee.

This Code was approved with thanks by The Council of the Michigan State Medical Society on January 24, 1957.

ANNUAL REPORT OF PUBLIC RELATIONS COMMITTEE—1956-1957

The goals of the Public Relations Committee during 1956-57 were to strengthen the position of the individual doctor in his relations with his public, to build a stronger public relations base at the county medical society level, and to increase the scope and effectiveness of the MSMS statewide PR program. Three separate methods were employed to accomplish this:

1. Public education through news media, building understanding and appreciation of the doctors' work and medical policy.

2. Specific assistance to county medical society PR chairmen through meetings, staff visits and up-to-date idea material.

3. Maintaining friends of medicine in the important fields of communications, professional organizations and the State and federal legislature.

At the July and January meetings, the Public Relations Committee embarked on several new programs to meet the challenge of changing times.

MSMS Study

The most ambitious project under way in the PR department is the MSMS study of public opinion regard-

ing medical service plans. Although not a responsibility of the Public Relations Committee, the four-part study is of such PR import it bears reporting here. The survey responsibility has been reserved to the Executive Committee itself with Public Relations Counsel Hugh W. Brenneman assigned to administer the project. David B. Luck, Director of the Bureau of Business Research, Michigan State University, has been retained as consultant, and the Market Opinion Research Company of Detroit will carry out an important section of the study.

Acting upon instructions of the House of Delegates, a statewide survey was authorized by The Council and was under way in mid-May. More than 600,000 people will have been reached when the survey is completed. From these data, a final report will be drafted for presentation to the September meeting of the House of Delegates in Grand Rapids.

The PR impact of this study is significant. For the first time anywhere, the public is being asked by doctors what it prefers in the way of medical-surgical coverage in any prepayment plan or health insurance policy. And at this writing press reaction to the MSMS weekly radio and press releases is most favorable, even though we are only in the early stages of the project.

Operation Armor

Another campaign, concluded this spring, which met with great success, was "Operation Armor." This was the doctors' own effort to urge the public to take advantage of all immunization procedures. Special emphasis was placed on having these done in the doctor's office. In connection with the campaign, the PR Committee authorized a mail survey of all local health officers to determine what percentage of immunizations had been done in clinic and office. The facts disclosed that only 15 per cent of the immunizations had been done in clinics and this information aided the Legislative Committee in warding off certain legislation inimical to the public good.

New PR Library

Proudest undertaking of the year, perhaps, is the establishment of the MSMS Public Relations Library. Although not yet completed, the new service is functioning under the direction of Librarian Vada Studt, of the MSMS PR staff. Organization of material, filing, indexing, et cetera, was directed by a professional librarian on loan from the Michigan State Library.

We believe this to be the first such library in the country devoted exclusively to medical public relations. Films, tapes, manuscripts, television and radio scripts, resource material on all socio-medical subjects are but a few of the services to MSMS members and county societies.

New Films

New films added to the Library during the past year include the latest MSMS Production, "Something Called Epilepsy." The film is a fifteen-minute color picture available for free loan to doctors and the public. Also, the first two films of the "Medicine and the Bar" series were purchased.

A kinescope of the live heart operation telecast during the March Michigan Clinical Institute was made by MSMS and distributed to out-State TV stations for delayed showing, since many stations were not able to carry the show direct. A copy of the kinescope is now available from the PR Library.

At the January meeting of the Public Relations Committee, the production of a special documentary film was recommended. The subject was to be the transition of the Wayne County Medical Society from its present quarters to the new David Whitney House now being constructed on the medical campus of Wayne State University. The short feature film is being produced in color under the supervision of a special committee, W. B.

Harm, M.D., Chairman. First showing of the picture will be at the dedication ceremonies for the new structure next spring.

Educational Exhibits

During the year, MSMS sponsored educational exhibits at the Michigan Rural Health Conference, the Michigan Clinical Institute, MSMS Annual Session, and the Michigan State Fair. The Muskegon County Medical Society Woman's Auxiliary was provided with an exhibit for their local Health Fair. Because of many requests for a lighter, more portable exhibit, the PR Committee authorized the creation of a new exhibit which would be more portable and adaptable to the needs of county medical societies. It is expected that the new exhibit will be available prior to September.

National Medical Education Week

National Medical Education Week, the second annual salute, was once again a success in Michigan. MSMS acted as statewide co-ordinator for the educational drive and released information to all press, radio and television stations, providing State-level support to the active local campaigns of the various county medical societies.

Radio and Television

In the field of radio and television, the Public Relations Committee felt that since the MSMS "Tell Me, Doctor" programs were continuing to prove popular, the transcriptions should be screened once again to eliminate out-of-date material. This task was referred to committee.

Television activity for the year continued at normal level and no new program was inaugurated. Still planned by the Committee, however, is a series of hour-long TV shows to be produced over a Detroit station at intervals of at least three months. This would allow adequate time for preparation of a truly high quality show.

Annual County Secretaries-PR Conference

From an educational standpoint, one of the highlights of the year was the annual County Secretaries-PR Conference held in Detroit at the Sheraton-Cadillac Hotel in January. The three-day meeting evaluated the problems facing medicine in 1957 and featured prominent panelists from the field of medicine, industry, labor and prepayment medical service plans. Attendance topped all previous records and both officers and PR Chairmen expressed appreciation for the unusually informative program.

The Committee felt that its 1957 report should contain some facts regarding the lesser known services and activities of the Public Relations staff. It felt that the larger projects received deserved attention and recognition, but that the more routine duties were not known to exist. As an example of the pace of office activity, during the previous twelve months, 543 long distance phone calls originated from Lansing in the conduct of MSMS PR business. And more than 600 meetings, conferences and business contacts were made by the PR staff during the same period. Again, Michigan news media received forty-one statewide press releases from MSMS and innumerable local releases on individual members. Reports and articles prepared for member information totaled sixteen, not including preparation of four issues of the Woman's Auxiliary Bulletin. During the year, the legislature was in session a total of ninety-six days, which required the attendance of at least one staff member each day and evening.

Looking ahead is a vital part of this Committee's function, and we are sure the future holds this much in store . . . work, and more of it. A cog in the public relations wheel is communications. It's a good cog only if you have something to say. We do. And we're going to say it over and over again.

Respectfully submitted,

R. W. TEED, M.D., *Chairman*
 A. B. GWINN, M.D.
 S. E. ANDREWS, M.D.
 H. G. BACON, JR., M.D.
 J. F. BEER, M.D.
 H. G. BENJAMIN, M.D.
 F. C. BRACE, M.D.
 H. F. BRADFIELD, M.D.
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 E. M. CHANDLER, M.D.
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 H. B. FENECH, M.D.
 E. H. FENTON, M.D.
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 L. E. GRATE, M.D.
 L. T. HENDERSON, M.D.
 W. J. HERRINGTON, M.D.
 E. J. HILL, M.D.
 L. W. HULL, M.D.
 J. M. JACOBOWITZ, M.D.
 K. H. JOHNSON, M.D.
 R. C. KINGSWOOD, M.D.
 J. L. LEACH, M.D.
 CLAYTON LEWIS, M.D.
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 I. M. SHELDON, M.D.
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 W. F. STRONG, M.D.
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 C. L. WESTON, M.D.
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 V. M. ZERBI, M.D.
 L. FERNALD FOSTER, M.D., *Advisor*
 H. J. MEIER, M.D., *Advisor*
 B. T. MONTGOMERY, M.D., *Advisor*
 A. E. SCHILLER, M.D., *Advisor*
 T. P. WICKLIFFE, M.D., *Advisor*

ANNUAL REPORT OF CHILD WELFARE COMMITTEE—1956-1957

The Child Welfare Committee, Michigan State Medical Society, and subcommittees continued their activities of the previous year and initiated several new projects.

The Committee sponsored the March issue of THE JOURNAL OF THE MICHIGAN STATE MEDICAL SOCIETY with special attention given some of the projects of the Committee, such as perinatal mortality, examination of children's eyes, the problems of adoption, and immunization routines.

The Subcommittee on Otolaryngology reports that screening clinics for hearing defects are being held in all county health areas for children with satisfactory results being obtained.

The Subcommittee on Ophthalmology has continued studying the problem of prophylaxis in ophthalmia neonatorum, the efficacy of visual acuity testing equipment, and other eye problems of children.

The Subcommittee on School Health has made progress toward a school health form suitable for the whole state and has been co-operating with the State Department of Education and with the Michigan School Health Association.

Work has been initiated in the field of adoption. Education of law and medical students in all phases of adoption has been started and there has been co-ordination and co-operation with other disciplines which are interested in this field. The role of the doctor in adoption was discussed in *THE JOURNAL*.

The Committee has started work on accident prevention. An effort is to be made to set up poison control centers, as well as a means to disseminate information to hospitals and to these centers.

It is hoped within the near future that a meeting may be held with representatives from each county medical society to review with members of the Child Welfare Committee what has been and what can be done on a local county level in the field of child welfare.

The Committee wishes to express its appreciation for the co-operation of the Michigan Department of Health, Michigan Crippled Children Commission, and will continue to serve to the best of its abilities advising the Michigan State Medical Society on current child welfare problems.

Respectfully submitted,

R. M. HEAVENRICH, M.D., *Chairman*
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 J. P. KLEIN, M.D.
 O. L. LEPARD, M.D.
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 L. O. SHANTZ, M.D.
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 H. A. TOWSLEY, M.D.
 FRANK VAN SCHOICK, M.D.
 E. H. WATSON, M.D.
 C. F. WIBLE, M.D.
 R. K. WISE, M.D.

ANNUAL REPORT OF BEAUMONT MEMORIAL COMMITTEE—1956-1957

Two serious problems have confronted the Beaumont Memorial Committee ever since the dedication of the Memorial in July, 1954.

First, the lack of finances for further development of the project. The Committee at no time requested The Council of the Michigan State Medical Society to advance additional sums of money, for it felt that the financing of this Memorial was the responsibility of the individual doctor of medicine of this state. It was on that premise that the old American Fur Trading Retail Store was restored as a memorial to Doctor William Beaumont. This problem to a large extent has been solved. By resolution, the 1956 House of Delegates urgently recommended that a special letter campaign be conducted. Such a letter was mailed on November 29, 1956, and the response was most gratifying.

The second problem was a lack of any working agreement between the Michigan State Medical Society and

the Mackinac Island State Park Commission. From time to time attempts had been made to obtain an agreement from the Commission as to what our part should be in regards to the completion of the Memorial. Our efforts all resulted in failure until Governor Williams called a joint meeting of the Mackinac Island State Park Commission, the Michigan Historical Commission, and the Beaumont Memorial Committee in his office on April 22, 1957. At this meeting our problems were presented, and it was mutually agreed that each desired the co-operation of the other. On the recommendation of the Governor, a representative of the Mackinac Island State Park Commission and the Michigan State Medical Society, with an Assistant Attorney General, met on May 1, 1957, to draft a mutually acceptable agreement.

The Committee is pleased that progress is now being made toward a satisfactory working agreement, although it will be some time before it can become official. The document must first have the approval of both the Mackinac Island State Park Commission and The Council of the Michigan State Medical Society.

Respectfully submitted,

OTTO O. BECK, M.D., *Chairman*
 L. R. LEADER, M.D.
 C. T. EKLUND, M.D.
 J. H. FYVIE, M.D.
 S. W. HOOBLER, M.D.
 W. M. LEFEVRE, M.D.
 A. H. WHITTAKER, M.D.
 MR. H. C. FRITSCH

ANNUAL REPORT OF ETHICS COMMITTEE—1956-1957

During the year several inquiries from local medical societies involving alleged ethics violations were referred to this Committee by The Council or its Executive Committee. With the exception of two cases, it was a matter of informing the writers that the first thing for them to do was to try to get an amicable agreement at home between the parties involved. If this failed, then their local Ethics Committee, in conformance with Chapter 6 of the MSMS By-Laws, may solve the problem. Nothing further was heard from these sources so it is assumed that they were handled satisfactorily on a local basis.

One of the two exceptions was a letter forwarded by a county medical society secretary that was received from an attorney in his town asking for an opinion. If the statements in the letter are true, it is, first, inconceivable that a doctor would be so crude as to offer his uninvited criticism of a fellow practitioner to the patient of another doctor in the scurrilous terms he was alleged to have used. Second, if there are other incidents like this that we do not hear about, it is no wonder that the premiums for malpractice insurance have skyrocketed to their present upper-stratosphere level. A shrug of the shoulder is often as incriminating as the spoken word.

To date, this glaring example of unethical conduct must be under local discussion. The second of the two exceptions was an appeal from a county society ruling and necessitated a meeting of the Committee during which every word of the accusations and denials and the transcription of the final hearing on the case were read and discussed. There was an unfortunate delay in the forwarding of some of the pertinent data during delivery of one letter. Therefore, we are unable to include the final result of our consideration of the case to meet the deadline of this report for the August number of *THE JOURNAL MSMS*.

However, we feel fairly sure that both sides eventually will be satisfied with the conclusion reached by our deliberations. If not, the case may have to be reopened by our successors appointed in September. The delay was not ours.

We would like to recommend that each county society

mention at some very early meeting that malpractice rates can be controlled by US if we can impress upon our members not to be so careless in their remarks about the ability of their fellow members or so openly critical of their work. It has become so expensive to insurance carriers that in one well known county the new doctor is being told the company will take his malpractice insurance business IF, and ONLY IF, they can carry ALL of his other insurance. Nobody else but us can bring these rates down. The Ethics Committee recommends we do something about it.

Respectfully submitted,
H. W. PORTER, M.D., *Chairman*
W. L. HARRIGAN, M.D.
R. J. HUBBELL, M.D.
F. H. LINDENFELD, M.D.
E. A. OAKES, M.D.
E. A. OSIUS, M.D.
A. H. PRICE, M.D.
W. F. STRONG, M.D.
C. E. UMPHREY, M.D.
M. R. WEED, M.D.

ANNUAL REPORT OF GERIATRICS COMMITTEE—1956-1957

The Geriatrics Committee met three times this past year—in Lansing, Flint and Ann Arbor—and each meeting was well attended.

As last year, members of our group helped in the planning of the Conference on Aging—health for the older person—which was held in Ann Arbor last July. Several members participated in the Conference contributing in different ways. Clinics were given at the University Hospital under the direction of the Department of Postgraduate Medicine at which geriatric problems were featured. Senior citizen forums were presented by members of the Committee on two different afternoons and proved to be valuable contributions to the Conference program.

The May issue of THE JOURNAL OF THE MICHIGAN STATE MEDICAL SOCIETY was devoted to a panel discussion on the value of exercise and good nutrition in improving the wellbeing of persons late in life. These data were compiled almost entirely by our Vice Chairman, Dr. F. C. Swartz, of Lansing, and great credit is due him for his efforts.

Meetings were held with Dr. A. E. Heustis and his staff in an effort to formulate new standards for nursing homes and homes for the aged. The licensure of nursing homes has been transferred to the Department of Health during the past year.

Several members of the Committee have participated in public forums in different areas of the state and more are being planned for this next year.

Considerable time was given by a subcommittee this past two years to investigating possible forms of insurance for the older person. Credit is due Dr. S. C. Wiersma for this effort and it is hoped that continued study will encourage insurance companies to formulate some form of coverage for persons unable to obtain it with present policies.

This coming year we plan to give considerable attention to the problem of handling the older person who is chronically ill.

Respectfully submitted,
A. HAZEN PRICE, M.D., *Chairman*
F. C. SWARTZ, M.D.
F. W. BASKE, M.D.
H. B. BENNETT, M.D.
T. H. BOTTOMLEY, JR., M.D.
J. R. BRINK, M.D.
W. P. CHESTER, M.D.
E. F. CRIPPEN, M.D.
R. E. DUSTIN, M.D.
G. S. FISHER, M.D.
P. C. GITTINS, M.D.

W. D. HARRELSON, M.D.
E. J. KULINSKI, M.D.
W. M. LEFEVRE, M.D.
JACK ROM, M.D.
HERBERT ROSENBAUM, M.D.
C. H. ROSS, M.D.
L. F. SEGAR, M.D.
C. W. SELLARS, M.D.,
S. C. WIERSMA, M.D.
H. W. WUGHTER, M.D.

ANNUAL REPORT OF LEGISLATIVE COMMITTEE—1956-1957

Five years ago, the legislature began meeting in regular session every year instead of the traditional every-other-year schedule. It was thought that this would allow the work of the sessions to be spread out a little, relieving the congestion in making laws for two years at a time. While this may have lessened the annual legislative activity of other groups, no relaxation has been afforded the medical profession in its dedication to maintaining for Michigan citizens the best health care programs of the nation.

More legislation concerning health problems was introduced this year than in any previous year. Of the 1,077 bills filed in the House and Senate, 133 were of direct concern to the profession. Every phase of health care was discussed. Highway accidents, mental health, tattooing, tuberculosis, medical insurance, annual licensure of M.D.'s and polio vaccine were but a few topics on which the members of the legislature sought advice from the doctors.

It is a tribute to both the wisdom of the lawmakers and the counsel of the members of MSMS that no legislation inimical to the public interest was passed during this year's four months' deliberations. It should be pointed out, too, that some desirable changes were made in the statutes.

Passed were measures that:—made possible initiation of more extensive research programs by the State Department of Health by permitting physicians to voluntarily submit confidential information without risk of violating the patient-physician relationship;—provided for involuntary commitment of tuberculosis patients to a state institution for treatment;—established mental and physical examination standards for school bus drivers;—prohibited tattooing of minors, except under physician's direction;—provided for certification of psychiatric attendant aides under the present State Board of Nursing.

MSMS does not oppose certain legislation merely for opposition's sake. It does oppose proposed changes in the laws such as those which would deprive the patient of his right to a free choice of physician or which would retard the advancement of medical science through arbitrary governmental restrictions.

Some defeated proposals in the 1957 session, which MSMS opposed would have:—increased narcotics license fees second time in two years, this time from \$2.00 to \$5.00;—provided for certification of psychiatric attendant aides under a separate new board;—consolidated health agencies of the state under a single administrator and two advisory groups. A similar proposal was introduced last year. MSMS sponsored an alternate plan to effect the purposes of the introducers, which also failed passage.

Other bills in which the MSMS showed interest and which the legislature by-passed this year for further study and possible re-introduction later would have:—established controls on radiation, atomic energy and allied materials;—provided for chemical tests of suspected drunk drivers;—designated prescription status for tranquilizers and alertness pills;—amended the 1913 county hospital act which governs the administration of less

than a dozen institutions;—tightened physical and mental standards of drivers' license applicants.

Two examples of the necessity of constant everyday legislative surveillance by MSMS are the polio vaccine bill and a bill providing for annual registration of M.D.'s.

Late in the session a measure was introduced in the Senate providing emergency funds for the purchase of more Salk vaccine for the "high risk" group in the state. In a sudden move, and under a suspension of rules, the Senate adopted an amendment which would have provided that all such vaccine must henceforth be administered only in "public health clinics."

If the House had concurred in this drastic procedure change, the group for whom the vaccine was intended would have suffered immeasurably. In many counties the establishment of such clinics would have been impossible; in others, they would have been overburdened and unworkable. Therefore, when the true facts of the situation were made known to the lawmakers by doctors from all over the state, this ill-advised amendment was removed.

The proposal for the annual registration (licensure) of M.D.'s which appeared late in the session also indicate how ideologic conflicts arise even in the field of medicine. The bill, as originally introduced, called for an annual fee of \$5, ostensibly to provide sufficient additional funds for the operation of the State Board of Registration in Medicine. This bill was thought by-passed for this session, but in the closing days it was reported out of Committee to the House floor, but amended to double the fee to \$10! It became then, purely and simply, a specific tax on the doctors; a means of obtaining additional money for the general operation of the state. When it was pointed out to the legislature that MSMS members vigorously objected to this arbitrary attempt to impose an obviously unfair levy on their group under the excuse that "the doctors can afford to pay it," the bill was subsequently referred back to committee.

It is expected, however, that a similar bill will appear again next year, with possibly a lesser fee which will provide only a sufficient amount of revenue to enable the Board of Registration to operate a necessary and desirable program.

As has been expressed many times before, any credit due the Legislative Committee of MSMS for "successes" in the legislative sphere must go to the individual M.D. in the county society who makes available to his senator and representative his counsel, experience and judgment in the field of health care, to which he is dedicated.

No less a tribute must be accorded the members of the legislature who have continually displayed an earnest desire to safeguard the highest possible quality of health care to Michigan's citizens.

Respectfully submitted,

L. A. DROLETT, M.D., *Chairman*

O. B. MCGILLICUDDY, M.D., *Vice Chairman*
A. B. ALDRICH, M.D.
WILLIAM BROMME, M.D.
G. V. CONOVER, M.D.
J. C. ELLIOTT, M.D.
O. K. ENGELKE, M.D.
N. J. HERSHEY, M.D.
M. H. MARKS, M.D.
H. L. MILLER, M.D.
P. T. MULLIGAN, M.D.
J. S. ROZAN, M.D.
G. W. SLAGLE, M.D.
E. C. SWANSON, M.D.
H. A. TOWSLEY, M.D.
R. V. WALKER, M.D.
D. BRUCE WILEY, M.D.

ON TAKING A VAGINAL CELL EXAMINATION

By the present established diagnostic methods, cancer of the uterus can be detected early enough so that, when treated, 89 to 90 per cent will survive five years or more. This means that the disease must be diagnosed during the preclinical or silent stage. Just as the periodic health examination is incomplete without a thorough vaginal examination, the pelvic examination is incomplete without a vaginal cell examination.

Smears may be obtained in several different ways—usually your pathologist will give you instructions in the method he prefers—as well as provide the materials needed.

Vaginal pool aspiration is the simplest and most generally used. Material is aspirated—using a small pipette made from a drinking tube with a capillary opening and a bulb. The patient should not take a douche prior to coming to the office. The smear is obtained before the pelvic examination or before any instrumentation. Fix the smear immediately in 95 per cent alcohol and ether.

Scraping material directly from the cervix is an excellent way to obtain a smear for early diagnosis of that organ. A spatula, tongue blade or cotton applicator may be used. It is important to get cells from as far up in the canal as possible. Do not scrape vigorously.

Some pathologists prefer at least one smear from the posterior fornix (aspiration) and one from the cervix (scraping). Two smears are better than one.

The tampon method of obtaining smears needs more study and evaluations before being used generally. It may well prove to be the simplest and most accurate method of obtaining a good sampling of vaginal exfoliation.

Finally, the pathologist will do his part to preserve doctor-patient relationship. He requires proper collection and preparation of specimens. He also must correlate cytologic findings with the biopsy as well as the clinical status of the patient.

HARRY M. NELSON, M.D.

FORT LAUDERDALE BEACH HOSPITAL

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A private hospital especially planned for the medical care and rehabilitation of the CHRONICALLY ILL, the AGED, and the HANDICAPPED.

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Patients accepted for long or short term care under direction of private physician.

MEDICAL RESIDENT STAFF

FOR information write to

Louis L. Amato, M.D., Medical Director

Kenneth A. Dahl, Administrator



Technical Exhibits

Abbott Laboratories
North Chicago, Ill.

Booth No. 505

HARMONYL®, a new tranquilizer and antihypertensive agent, will be among the new products Abbott Laboratories will exhibit. Other products to be shown will include a new therapeutic agent for peptic ulcer, **TRAL®**; an aerosol solution for treatment of chronic pulmonary diseases, **TERGEMIST®**; an anticonvulsant for control of grand mal epilepsy, **PEGANONE®**; an aid in the management of atherosclerosis, **SAFF**, and Abbott's complete line of intravenous solutions and equipment.

A. S. Aloe Company
St. Louis, Mo.

Booth No. 419

Visit Booth No. 419 where the A. S. Aloe Company will have on display a cross-section of their most complete line of physicians and laboratory supplies and equipment.

Our representatives will certainly appreciate discussing mutual items of interest with you.

American Ferment Company, Inc.
New York 18, N. Y.

Booth No. 104

Stop at the booth for your personal supply of Falgos, the buffered compound analgesic that acts quickly and without gastric upset. Let us also explain the advantages of Carotid and Bile Salts Tablets, Alcaroid Antacid, and Supligol, the whole bile-ketocholanic acid compound.

Ames Company, Inc.
Elkhart, Ind.

Booth No. P-22

The Ames Company exhibit will feature an entirely new concept in the detection and evaluation of proteinuria—a new colorimetric test supplied in two forms: **ALBUTEST** Tablets and **ALBUSTIX** Reagent Strips. Results are obtained in seconds. Demonstration by Ames representatives will show the many advantages of this new principle.

Armour Laboratories
Kankakee, Ill.

Booth No. 513

The Armour Laboratories will feature Chymar, Tryptar Antibiotic Ointment, and Arcofac, the new cholesterol lowering factor recently added to the Armour line. Our representatives will be happy to discuss our products with all who wish to stop at the Armour booth.

Atlas Pharmaceutical Laboratories, Inc.
Detroit 12, Mich.

Booth No. 102A

The newest and most modern plant in the State of Michigan, designed exclusively for the manufacture of ethical injectable medicaments. We do not buy our products—We make them.

Audio-Digest Foundation
Glendale 6, Calif.

Booth No. 520

Audio-Digest Foundation—a subsidiary of the California Medical Association—gives the busy physician an effortless tour through the best of current medical literature each week. This medical tape-recorded "new-cast"—compiled and reviewed by a professional Board of Editors—may be heard in the physician's automobile, home or office. The Foundation also offers medical lectures by nationally recognized authorities.

Ayerst Laboratories
Chicago 41, Ill.

Booth No. 212

The Ayerst exhibit will feature "Thiosulfil." The high degree of solubility of this single sulfa makes it ideally suited for treating urinary tract infections safely and effectively.

Baby Development Clinic
Chicago 54, Ill.

Booth No. 509

Baby Development Clinic invites you to visit space 509 to learn about New Lifebuoy with **TMTD** (**TMTD**) is the new germicide developed by Lever Brothers). Samples and literature available. See new Evenflo bottles of Superplastic and other new feeding products made by Pyramid Rubber Company, makers of Patented Twin Air Valve Nipples; special samples for demonstration. Revolutionary products by Model-la promote good sleeping: Sleepy Drye waterproof panties together with Mitey Drye liner prevent diaper rash. Become acquainted with The Book House, a reading plan for parents and children from infancy through high school.

Baker Laboratories, Inc.
Cleveland 3, Ohio

Booth No. 504

You are invited to visit our booth where Baker's Modified Milk and Varamel, two successful products for infant feeding, are on display.

Baker representatives will be glad to discuss with you the special features of Baker Milk products which promote better tolerance, less colic, better gain and improved tissue turgor for bottle-fed infants.

Bard-Parker Co., Inc.
Danbury, Conn.

Booth No. 202

B-P surgical knife handles and Rib-Back blades. The time and labor saving **RACK-PACK** which provides extra blade protection. Blade forceps. The Reese Dermatome. B-P Formaldehyde Germicide, which is sporicidal, virucidal, and tuberculocidal. Chlorophenyl, and the new B-P concentrate "**Halimide**." Also B-P blade jars, instrument containers and transfer forceps. C. F. pipettes with permanent markings.

Barry Laboratories, Inc.
Detroit 14, Mich.

Booth No. 109

Barry Laboratories present a complete line of allergy preparations to meet any patient's individual requirements. Sets to accurately test for irritants and treatment to "specifically desensitize for perennial results."

Barry Laboratories also present a complete line of sterile injectables in ampuls and multiple dose vials.

Baxter Laboratories, Inc.
Morton Grove, Ill.

Booth No. P-25

Baxter Laboratories, Inc., presents the latest developments in parenteral fluids and administration equipment. **INCERT**—the only one-step sterile additive vial for supplementing parenteral fluids. Add B vitamins with C, succinylcholine chloride, and electrolytes without needle or syringe.

See **TRAVAD**—ready-to-use disposable enema unit featuring a pre-lubricated tip, 18 inches of flexible tubing and finger tip volume control.

TECHNICAL EXHIBITS

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Chicago 12, Ill.

Booth No. 110

Borchardt is featuring a new use for Malt Soup Extract. In addition to its stool softening properties, Malt Soup Extract, has been found very useful for the problem of Pruritus Ani. Stop in for information and a recently presented paper on this new use. Information on the influence of aciduric intestinal flora in correction of constipation and relief of pruritus ani is available.

The Borden Company
New York 17, N. Y.

Booth No. 201

Borden's Prescription Products booth is the place to discuss the latest in infant nutrition. On display are: MULL-SOY, the pioneer hypoallergenic formula food; BREMIL, a complete food, patterned after breast milk, for the normal infant; DRYCO, a high protein, low fat product especially suited to prematures, and BETA LACTOSE, the ideal milk sugar.

Bristol-Myers Products Division
New York 1, N. Y.

Booth No. 512

BUFFERIN, the better-tolerated antacid-analgesic for long-term salicylate therapy, will be featured by Bristol-Myers. Also AMMENS Medicated Powder, a highly efficacious dispersion of talc in cornstarch; MINIT-RUB, a greaseless-stainless rubefacient; and new THERADAN, for long-lasting relief of seborrhea of the scalp.

Brooks Appliance Company
Chicago 2, Ill.

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The Brooks Appliance Company will exhibit and describe in detail the technique of applying the combination pressure bandages. The moist medicated Primer bandage plus the Dalzoflex Elastic Adhesive bandage which are used in treating leg ulcers and phlebitis. As distributors of anatomical supports, our representatives will be in attendance to answer questions and explain in detail our sacral, sacral-lumbar and dorsal lumbar supports.

Elastic stockings, the Nulast Elastic Crepe bandages and surgical instruments will also be displayed.

Burdick Corporation
Milton, Wis.

Booth No. 301

Burroughs Wellcome & Co.
Tuckahoe 7, N. Y.

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Through such research B. W. & Co. has made notable advances related to leukemia, malaria, diabetes, and diseases of the autonomic nervous system; and to antibiotic, muscle-relaxant, antihistaminic, and anti-nauseant drugs.

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Cambridge Instrument Company, Inc. **Booth No. 514**
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The Cambridge Audio-Visual Heart Sound Recorder; the well-known Cambridge "Simpli-Scribe" Model Direct-Writing Portable Electrocardiograph and the Cambridge Standard String Galvanometer Electrocardiograph, both in the "Simpli-Trol" Portable and

the Mobile Model Electrocardiograph-Stethograph with Pulse Recorder, will be displayed at this booth. Also, other important Cambridge instruments, including the Operating Room Cardioscope, Educational Cardioscope, Multi-Channel Direct-Writing Recorder, Elektokymograph, Plethysmograph, and pH Meters.

The Cambridge Engineers in attendance will be glad to give you complete information on these instruments.

Carnation Company
Los Angeles 36, Calif.

Booth No. 308

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Central Pharmacal Co.
Seymour, Ind.

Booth No. 508

The Central exhibit will feature NEOLAX for physiologic treatment of chronic constipation; NEOPARBEL, a highly effective product for the prevention and treatment of primary dysmenorrhea; and the NEOCYLATE FAMILY of potentiated salicylate products.

Literature and samples of these specialties will be available.

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Chicago, Ill.

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The following CHIMEDIC products will be featured: URISED: Nationally known and clinically proven tablet for both comfortable sedation and thorough antiseptics in all types of genitourinary affections; RESYDESS: The anti-obesity tablet which reduces weight, yet calms the patient keeping him free from stress and anxiety; plus a complete line of injectables, tablets, liquids and ointments awaiting your inspection.

Chicago Reference Book Company
Chicago 3, Ill.

Booth No. 111

The Chicago Reference Book Co. are the official distributors of Webster's New International Dictionary, Second Edition, with Reference History for the state of Michigan. We invite all visitors to the Annual Session to inspect "The Supreme Authority" at Booth No. 111. See the 1957 edition and ask about our special offer of the Hammond Atlas and 33" x 50" Wall Map of the World.

Equal in type matter to a 21-volume encyclopedia at only a fraction of the price of such a set. The Dictionary with Reference History is still the greatest bargain in reference books and will be in use almost daily when once available in your home or office.

Christian Medical Society
Chicago 6, Ill.

Booth No. 617

Representatives of the Christian Medical Society are here to explain the purpose and projects of the Society. CHRISTIAN LIFE AND THE UNCONSCIOUS, PSYCHO-THERAPY AND THE CHRISTIAN MESSAGE, A CHRISTIAN APPROACH TO PSYCHOLOGICAL MEDICINE are among the books and pamphlets on display. Copies of the Christian Medical JOURNAL are available.

Ciba Pharmaceutical Products, Inc.
Summit, N. J.

Booth No. P-3

CIBA is exhibiting Vioform-Hydrocortisone Cream, an extremely effective preparation for controlling a wide variety of acute and chronic skin disorders. It is antifungal, antibacterial, anti-inflammatory and antipruritic—a four-way means for providing relief of itching and inflammation and rapid healing. Moreover, it is effective where many antibiotic combinations fail.

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DePuy Manufacturing Co.
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DESITIN POWDER: pioneer cod liver oil dusting powder for the treatment of intertrigo, diaper rash, exanthema, abrasions, etc.

DESITIN HEMORRHOIDAL SUPPOSITORIES: relieve pain and itching, promote healing, give comfort in uncomplicated hemorrhoids, fissures. Contain no anesthetics or styptics.

RECTAL DESITIN OINTMENT: for effective relief in simple hemorrhoids, pruritus and fissures. No anesthetics.

DESITIN LOTION: soothing, protective, mildly astringent for the treatment of pruritus, poison ivy and non-specific dermatitis.

DESITIN COSMETIC AND NURSERY SOAP:

supermild, non-allergenic, pleasantly scented, deodorant.

Detroit X-Ray Sales Co.
Detroit, Mich.

Booth Nos. P-16, P-17, P-18

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Booth No. 115

For busy doctors—the Dictaphone Time-Master dictating machine with plastic Dictabelt record. Word-work goes more easily with the Time-Master, saving an hour a day and resulting in complete, accurate case histories. Check the new Dictaphone Time-Master dictating machine with facilities for recording both sides of important telephone conversations. For doctors-on-the-move, the new Dictaphone Dictet portable tape recorder. Less than three pounds light, battery-powered, the Dictet brings a new dimension of voice recording usefulness to the medical profession.

Dietene Company
Minneapolis, Minn.

Booth No. 405

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While you're there, review the Dietene Diet based on DIETENE Reducing Supplement. It provides the rare combination of low calories (1000) with high intake of protein and all essential vitamins and minerals in an interesting, effective, SAFE weight reducing diet.

Doho Chemical Corporation
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Booth No. 414

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AURALGAN: Ear medication in Otitis Media and removal of Cerumen.

OTOSMOSAN: Effective, non-toxic Fungicide Bactericidal (Gram negative-Gram positive) suppurative and auricular otitis media.

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NEW LARYLGAN: Soothing lozenge and gargle for infectious and non-infectious sore throat involvements.

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Booth No. P-21

Furadantin® is one of the most effective and rapidly acting agents available at this time for the treatment of prostatitis and acute and chronic urinary tract infections.

Furadantin has specific affinity for the urinary tract, producing antibacterial concentration in 30 minutes. Five years of extensive use demonstrate negligible development of bacterial resistance.

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Bryan, Ohio

Booth No. 312



We sincerely invite all members of the Michigan State Medical Society and their guests to our booth. We will feature OXSORALEN and BENOQUIN, two dermatological products of note, as well as MAGNOCYL Capsules and RAPAX Inserts—new approaches to fecal softening

and peristalsis initiation. Features of these unique specialties will be thoroughly explained by our staff.

Encyclopedia Americana Booth No. 411
Grand Rapids, Mich.

Encyclopedia Americana invites you to inspect its 1957 edition—the ultimate in modern reference. No up-to-date school, college, university or library is without it, as leading educators prefer and find it superior to all others. We are extremely proud of the fact that more than 1000 sets have been delivered to the U.S. Government for use in every major department. As usual, you will be most cordially welcomed.

Ferndale Surgical, Inc. Booth No. 216
Ferndale, Mich.

Surgical instruments, diagnostic and examination equipment. Pharmaceutical specialties of our own manufacture. Inquires on special formulas will be welcomed.

H. G. Fischer & Co. Booth No. 103
Detroit 27, Mich.

You can personally examine the most modern x-ray equipment of the highest quality and greatest versatility as well as a complete line of physical medicine and rehabilitation equipment. Our Detroit office offers you prompt and efficient service. Visit our booth and ask for a free copy of our X-Ray Manual.

C. B. Fleet Company, Inc. Booth No. 208
Lynchburg, Va.

During the past fifty years PHOSPHO-SODA (FLEET) has been a symbol of elegance in sodium phosphate medication. FLEET ENEMA DISPOSABLE UNIT—an enema solution of Phospho-Soda (Fleet)—is a worthy companion product. The single-use unit simplifies and assures satisfying preparation for proctoscopy and as a routine enema it is a boon to the hospitalized patient.

Wint, Eaton & Company Booth No. 413
Chicago, Ill.

Eaton and Company features Ferrolip, a safe, well tolerated form of chelated iron. Also featured for predictable, uncomplicated relief in urinary tract infections.

E. Fougere & Company, Inc. Booth No. 409
New York 13, N. Y.

E. FOUGERA & COMPANY, INC. CORDIALLY INVITES PHYSICIANS TO VISIT OUR BOOTH WHERE PRODUCTS IN THE FIELDS OF CARDIOLOGY, DERMATOLOGY AND RADIOLOGY WILL BE DISPLAYED. PROFESSIONAL SERVICE PERSONNEL WILL BE PRESENT TO DISCUSS WITH YOU THESE PRODUCTS AND SUPPLY CLINICAL MATERIALS IF DESIRED.

Freeman Mfg. Company Booth No. 416
Sturgis, Mich.

The Freeman line of Surgical Supports places particular emphasis on orthopedic braces for use when conservative measures are indicated. Rigid control and almost complete immobilization of the sacral, lumbar and thoracic area are achieved through the use of splint type construction in combination with the block and tackle effect of straps and buckles. Special designs and constructions are available for any purpose.

Geigy Chemical Corporation Booth No. 619
Yonkers, N. Y.

The Geigy exhibit will feature PRELUDIN—the new chemically different appetite suppressant noted for its absence of side actions. Also on display will be BUTAZOLIDIN—potent non-hormonal antiarthritic; new STEROSAN Hydrocortisone Ointment—anti-inflammatory, bacteriostat and fungistat, and other well known Geigy products.

General Electric X-Ray Corp. Booth No. P-19
Detroit, Mich.

X-Ray Department, General Electric Company, manufactures of complete X-Ray equipment from portable diagnostic to 2,000,000 volt therapy apparatus—electrocardiograph—diathermy—X-Ray accessories and supplies. X-Ray equipment of new design will be shown at this meeting. We are looking forward to seeing you.

Gerber Products Company Booth No. 319
Fremont, Mich.

WHEN MILK IS CONTRAINDICATED as the basic food for infants, Gerber "Meat Base Formula" can provide a nutritionally adequate replacement. It is well accepted and tolerated by infants of all ages. Your Gerber detailman invites you to evaluate "Meat Base Formula" and the complete line of supplementary baby foods.

Grand Rapids Creamery Booth No. P-7
Grand Rapids, Mich.



The Grand Rapids Creamery, local distributors of Sealtest Milk and Dairy Products, invite you to stop at the Sealtest booth and enjoy a complimentary bottle of Sealtest Milk.

Gray Pharmaceutical Co., Inc. Booth No. 516
Newton, Mass.

L-Glutavite, while being considered neither as a stimulant nor as a tranquilizer, promotes a favorable change in the behavior pattern of the geriatric patient, whether he be belligerent, agitated, catatonic or depressed. L-Glutavite is available in three convenient dosage forms: packets, economy canisters and capsules.

Quinoplex, a neurotropic bowel tonic promotes the return of normal peristalsis and bowel tone in patients who have become constipated because of concurrent use of hypotensive blocking agents or habitual use of harsh irritating laxatives. Clinical studies report Quinoplex to be effective in correcting constipation at the low dosage level of 1-2 tablets upon retiring.

H. J. Heinz Co. Booth No. 210
Pittsburgh, Pa.

Heinz Baby Foods provide babies with the necessary nutrients for steady growth and sound bodies. These foods also make appetizing meals for older patients and convalescents.

Here are the newest Baby Foods. They are Heinz originals: Strained Vegetables, Egg Noodles and Chicken, Strained Chicken Noodle Dinner; Strained Potatoes (White); Junior Vegetables, Egg Noodles and Chicken; Junior Chicken; Junior Breakfast—Cereal, Eggs and Bacon; Junior Spaghetti, Tomato Sauce and Meat; High Protein Cereal.

The Nutritional Data Book for physicians and literature for mothers' use are available.

Hoffmann-LaRoche, Inc.
Nutley 10, N. J.

Booth No. 320

Gantrimycin combines 333 mg Gantrisin and 75 mg oleandomycin for use in a wide variety of bacterial infections. Oleandomycin is a new antibiotic principally active against Gram-positive microorganisms. It does not display cross resistance with most other antibiotics. Gantrisin is effective against both Gram-positive and Gram-negative pathogens. It is soluble in acid urine. No alkalization or forcing of fluids is needed.

Lipo Gantrisin usually provides therapeutic antibacterial blood levels for 12 hours with a single dose. Just two doses a day are adequate in most infections. Each teaspoonful of Lipo Gantrisin contains one gram Gantrisin Acetyl, twice the concentration of most aqueous sulfonamide suspensions. Useful in respiratory, localized, systemic, and urinary tract infections, when due to susceptible microorganisms.

Holland-Rantos Co., Inc.
New York 13, N. Y.

Booth No. 101

Interested physicians may obtain, on request from H-R convention representatives, the leaflet "Facts You Should Know About the Superiority of KORO-MEX Jelly" which summarizes positive proof that KORO-MEX is more spermicidal.

An improved diaphragm any patient can easily and correctly place—the KORO-FLEX DIAPHRAGM—also will be on exhibit for your inspection.

Other vaginitis-preparations failed? May we invite you to investigate the merits of NYLMERATE Jelly and Antiseptic Solution Concentrate—effectively trichomonocidal, fungicidal and bactericidal—which will be on display, along with HOLLANDEX Silicone Ointment with natural vitamins A & D for minor skin disorders of infants, children and adults.

G. A. Ingram Company
Detroit 1, Mich.

Booth Nos. 302, 304

THE G. A. INGRAM COMPANY will, as usual, have many new items of interest on display in spaces 302 and 304, and the salesmen in charge of this exhibit will be in a position to give you full information regarding both the new items as well as all other equipment on display. We shall look forward with pleasure to having you stop at our booths to say "hello."

Johnson and Johnson
New Brunswick, N. J.

Booth No. P-11

Johnson & Johnson will display Johnson's Elastic Hosiery and Johnson's Baby Products along with other new developments of the Johnson & Johnson Research Laboratories. You will find well-informed representatives pleased to discuss these products with you and provide information on any other items made available by the world's largest manufacturer of surgical dressings and baby products.

C. B. Kendall Company
Indianapolis 6, Ind.

Booth No. 317

You are cordially invited to visit the C. B. Kendall Co. Exhibit featuring Tablets Basigets, which provides nonvirilizing anabolic hormones, hematinic factors and complete nutritional supplementation for patients in the "Second Forty Years." Also Fine-Sul Tablets and Liquid presenting broadspectrum antibacterial action that avoids fastness or complications of side-effects in the treatment of urinary tract in-

fections, will be exhibited. Informed representatives will be on hand to discuss these and other fine pharmaceuticals offered by the Company.

Kenfre Manufacturing Co.
Grand Rapids, Mich.

Booth No. P-13

Latest types of transistor hearing aids. **Audiometers**—pure-tone and speech reception—for individual and group screening tests; custom-engineered for physicians, industry, and schools. Manufactured by Audivox, Inc., successor to Western Electric Hearing Aid Division. Audivox hearing aids are licensed under patents of American Telephone and Telegraph Company, Western Electric Company, Inc. and Bell Telephone Laboratories, Inc.

Kremers-Urban Company
Milwaukee 1, Wis.

Booth No. 601

The KREMERS-URBAN booth will feature the most effective visceral antispasmodic LEVSIN . . . KUTAPRESSIN for the control of capillary bleeding and for rebellious skin diseases . . . MILKINOL "Improved" the new hydro-lipo-philic constipation correctant.

A. Kuhlman & Company
Detroit, Mich.

Booth No. 420

The A. Kuhlman & Co. will display diagnostic and surgical instruments as well as examining room furniture and physical therapy equipment. Included in our display will be a complete line of Stille surgical instruments.

Lea & Febiger
Philadelphia 6, Pa.

Booth No. 102

Be sure to see: Hewitt on *Alcoholism*; MacNeal, Alpers and O'Brien on *Headache*; Pollack—*Tumor Surgery of the Head and Neck*; Blinick and Kaufman—*Modern Office Gynecology*; Dufault—*Diagnosis and Treatment of Pulmonary Tuberculosis*; Faust and Russell—*Clinical Parasitology*; Schwartz, Tulipan and Birmingham—*Occupational Diseases of the Skin*; Quick—*Hemorrhagic Diseases*; Zimmerman, Netsky and Davidoff—*Atlas of Tumors of the Nervous System*; and many others.

Lederle Laboratories
Pearl River, N. Y.

Booth No. 214

You are cordially invited to visit the Lederle booth where our medical representatives will be in attendance to provide the latest information and literature available on our line. Featured will be Achromycin V, Vitamins, Kynex, and many other of our dependable quality products.

Lewal Pharmaceutical Co.
Chicago 14, Ill.

Booth No. 615

A new therapeutic approach to the treatment of pruritus ani will be featured at the Lewal Pharmaceutical Company's booth No. 615.

HYDROLAMINS—topically applied amino acids—have been found to bring rapid relief in 98% of cases with complete healing in 88%. No side effects have been reported.

Physical evidence of improvement will be shown with, before and after kodachromes of actual clinical cases.

Lielbe-Flarsheim Co.
Cincinnati 15, Ohio

Booth No. 116

The Lielbe-Flarsheim Company cordially invites you to visit booth No. 116 in which their latest electro-medical-electrosurgical equipment will be exhibited.

TECHNICAL EXHIBITS

We ask particularly that you stop and see the L-F BasalMeterR, the first automatic, self-calculating metabolism unit ever offered. Capable representatives will be on hand at all times.

Eli Lilly & Company
Indianapolis 6, Ind.

You are cordially invited to visit the Lilly exhibit located in spaces numbers 517 and 519. The Lilly salespeople in attendance welcome your questions about Lilly products and recent therapeutic developments.

J. B. Lippincott Company
Philadelphia 5, Pa.

J. B. Lippincott Company presents, for your approval, a display of professional books and journals geared to the latest and most important trends in current medicine and surgery. These publications, written and edited by men active in clinical fields and teaching, are a continuation of more than 100 years of traditionally significant publishing.

Lybeck Business Systems Booth No. 613
Detroit, Mich.

Maico Detroit Company **Booth No. 412**
Detroit, Mich.

90% of America's precision test instruments are Maico made. Maico produced the first precision hearing test instrument to receive acceptance of AMA's council on Physical Medicine in 1939. Maico produced the first wearable vacuum tube aid to receive AMA acceptance 1940. Maico produced the first all transistor hearing aid 1953.

Maltbie Laboratories Division **Booth No. 211**
Belleville, N. J.

You are cordially invited to visit the Maltbie Laboratories booth featuring the new Cholan-V, effective hydrocholeresis with superior spasmolysis, in hepatic impairment and gallbladder dysfunction; Caldesene Medicated Powder, for relief and prevention of diaper rash; Bifran, to overcome excess weight and its consequences; and Desenex, night and day protection and treatment for Athlete's Foot.

Marion Laboratories, Inc. **Booth No. 609**
Kansas City, Mo.

OYSTER SHELL CALCIUM—Naturally better assimilation with **OYSTER SHELL CALCIUM**. Research shows twice the percental increase of total blood calcium and 40% greater increase in ionized calcium than with other forms of calcium.

S. E. Massengill Company **Booth No. 203**
Bristol, Tenn.

The S. E. Massengill Company extends its wishes for a most successful meeting and invites the convention to visit its booth and discuss Massengill Pharmaceutical products. The S. E. Massengill Company will feature Adrenosem Salicylate (the unique systemis hemostat), Homagenets (the only homogenized vitamins in a solid form), Salcort (a safe effective anti-arthritis) and Massengill Powder.

McNamara Medical Equipment Co. Booth No. 318
Detroit 21, Mich.

McNamara Medical Equipment Company will show some of the latest equipment in the Physical Therapy field. The latest in traction, vertical and horizontal, Ille Whirlpools, Hydrocolator Steam Packs, and other physical therapeutic devices.

Mead Johnson & Company **Booth No. 205**
Evansville, Ind.

The Mead Johnson exhibit has been arranged to give you the optimum in quick service and complete product information. The exhibit will be staffed by specially trained representatives who will be prepared to provide you with information on any of these products or product "families:" (1) Tempra—the first physician controlled antipyretic/analgesic in drop and teaspoon dosage form. (2) The Mead Johnson Formula Products Family—the most complete feeding service for well and sick infants. (3) The Deca Vitamin Family—vitamins in three convenient dosage forms providing comprehensive vitamin protection for infants and children. (4) The Pabulum Products—featuring the new Pabulum Assorted-Pak. (5) The Colace Products Family for the management of constipation.

Medco Products Co. Booth No. P-6
Tulsa, Okla.

Presenting the MEDCO-SONLATOR. Providing a new concept in therapy by combining muscle stimulation and ultra sound simultaneously through a SINGLE Three-Way Sound Applicator. The MEDCO-SONLATOR is a distinct advance in the effectiveness of physical therapy in your office or hospital. A few minutes spent in our booth should prove of value to your practice.

Medical Arts Supply Co. **Booth Nos. 309, 311**
Grand Rapids, Mich.

The Medical Arts Supply Company will exhibit the latest in Ritter equipment. Hamilton examining room equipment and the various styles of reception room furniture.

The new Liebel Flarsheim Basalmeter, and the Liebel Flarsheim Bovie and Short Wave, plus a fine display of Stille instruments. Grand Rapids being our home town, we invite all of our good customers to visit our large show rooms.

Medical Protective Company **Booth No. 117**
Fort Wayne, Ind.

MALPRACTICE PROPHYLAXIS . . . Less Malpractice Publicity for public consumption, Individual Insurance free from charges of a "doctor's combine," Periodic Information to policyholders, Fighting Defense, Insurance Diagnosis that eliminates contribution, Avoidance of Insurance Overdose that increases litigation and losses, plus 58 years of Specialized Service make Medical Protective policyholders safer.

Merck Sharp & Dohme,
Philadelphia, Pa.

The Merck Sharp & Dohme exhibit highlights steroid therapy featuring new adrenal cortical steroid preparations—“Meprolone,” “Hydeltra,” T.B.A., and “Neo-Hydeltrasol.” New anti-bacterial agents of clinical significance are also featured. Technically trained personnel will be present to discuss these and other subjects of clinical interest.

Wm. S. Merrell Company
Cincinnati 15, Ohio

Booth No. 506

Merrell representatives will be on hand to discuss TACE, a new distinctive estrogen and Bendectin, a new unique drug for the treatment and prevention of nausea and vomiting in pregnancy. Please stop at our booth; our representatives will be happy to talk with you.

Meyer and Company
St. Clair Shores, Mich.

Booth No. P-14

Therapy of ARTERIOSCLEROSIS has evoked an intensified interest among all members of the medical profession.

The new Meyer product "ATHEMOL" whose action is predicated upon its effect in the bloodstream upon the colloidal stability of the blood and the return of precipitated lipoprotein complexes into the bloodstream, will be of paramount interest to every doctor attending this meeting.

Michigan Medical Service
Detroit, Michigan

Booth No. 305

You are cordially invited to visit Booth No. 305 and Suite to obtain current information regarding Michigan Medical Service (Blue Shield). Our representatives will gladly visit with you and answer any questions you may have with regard to your Blue Shield Plan. Hospitality Suite open 5:00 to 7:00 p.m.

Middleton's Inc.
Grand Rapids, Mich.

Booth No. 114

Middleton's will have a display of the finest in surgical products produced from plastics. Surgical instruments and appliances, plus a demonstration and display of plastic dressing and first aid supplies.

Also see the latest in German stainless steel instruments and manometers; New Patterns, New Designs; New Ideas.

Milex Products
Oak Park 37, Mich.

Booth No. 112

Milex Company has a complete line of Gynecic Specialties to offer the medical profession featuring the Crescent Diaphragm with built-in inserter, Folding Pessaries which are manually shapeable, a Cancer Detection Unit, Marital Guides, Fertility Program, "Lestens" for premenstrual tension and dysmenorrhea, and several other unique products.

Miller Surgical Company
Chicago, Ill.

Booth No. 315

See the Miller Electro Surgical Units and accessories such as Snares, Suction-Coagulation attachments, Forceps, etc. A complete line of diagnostic equipment consisting of illuminated Otoscope, Ophthalmoscope, Eyespud with Magnet, Transillumination Lamps, Mirror Headlite, Vaginal Speculum with Smoke Ejector and Gorsch Operating Scopes, and stainless steel Proctoscopes, all sizes, with magnification will also be on display.

Mullers Shoes, Inc.
Grand Rapids, Mich.

Booth No. P-15

In our booth you will see the latest in special feature shoes and accepted wedge practices. Some of the shoes shown will be Sabel's completely new line, Markell's Supernators and Pronators, and our own straight last shoes. We are set up to handle any of your prescription shoe needs. Our trained staff will be on hand to answer any questions.

National Live Stock & Meat Board Booth No. 605
Chicago 5, Ill.

This nutrition exhibit emphasizes the importance of a good breakfast. Colorful pictures show complete breakfasts and the interesting variety of meats around which good breakfasts are built. Meat for breakfast helps provide one-fourth to one-third of the day's food needs, especially high quality protein.

Nepera Laboratories Division
Morris Plains, N. J.

Booth No. 515

Biomydrin-Ophthalmic is the latest addition to the Biomydrin family. It contains two antibiotics for broad antibacterial effects plus an antihistaminic for the control of allergic ocular infections. This unique combination has been found effective in both acute and chronic ocular infections and allergies. Available in a unique dropmatic bottle. Methyl cellulose has been added to assure prolonged contact.

Mandelamine Suspension is a new, pleasantly flavored liquid from Methanamine Mandelate in Sesame oil, for use particularly in pediatric urinary tract infections. It is safe, effective, practical and economical especially for long-term therapy.

Cholarace, a new product of Nepera research, is a combination of Choleleryl (Choline theophyllinate), Racephedrine and Pentobarbital for use in the immediate and prolonged treatment of acute bronchospasm due to or associated with asthma, hay fever, emphysema, bronchitis, bronchiectasis.

Wm. R. Niedelson Co.
Detroit 21, Mich.

Booth No. 401

The Jones "AIR-BASAL"—the Profexray "ROCKET" series and other diagnostic equipment in the latest designs will be demonstrated. Ultrasound equipment and techniques will be fully described to those interested in the newest modality in Physio-Therapy today.

Noble-Blackmer, Inc.
Jackson, Mich.

Booth Nos. 118, 119

Your friendly representatives from Noble-Blackmer, Inc., will be in attendance at Booths 118 and 119 (corner at the end of the first row). Please stop in and look over our display of the latest and most modern equipment and supplies being manufactured for the modern physician.

Nordmark Pharmaceutical Laboratories, Inc.

Booth No. 417

Irvington, N. J.

New Iron therapy—FERRONORD (TM) tablets, a brand of ferroglycine sulfate complex iron—will be featured. Extensive research has developed an aminoacetic complex of iron which supplies ferrous ions protected against oxidation in pH ranges of stomach and intestine. FERRONORD provides for: (1) Optimal absorption of ferrous iron; (2) freedom from the side effects usually associated with iron therapy; (3) rapid increase of serum iron levels in days; and (4) correspondingly higher hemoglobin levels in days.

So well tolerated, FERRONORD should be given on an empty stomach, or between meals, for optimal absorption.

Ortho Pharmaceutical Corporation Booth No. P-12
Raritan, N. J.

ORTHO cordially invites you to Booth P-12. Featured will be DELFEN Vaginal Cream, Ortho's most spermicidal contraceptive. RARICAL Iron-Calcium Tablets, a compound for use in iron-deficiency anemias and in all cases requiring calcium supplementation, and RARICAL Iron-Calcium With Vitamin Tablets will also be displayed. Ortho

TECHNICAL EXHIBITS

representatives welcome this opportunity to discuss their products with you.

Parke, Davis & Company
Detroit 32, Mich.

Booth No. 306

Medical service members of our staff will be in attendance at our exhibit for consultation and discussion of various products. Important specialties, such as Penicillin S-R, Benadryl, Ambodryl, Dilantin Suspension, Vitamins, Oxyel, Milontin, Eldec, Amphedase, Thrombin Topical, etc., will be featured. You are cordially invited to visit our exhibit.

Pelton & Crane Company
Charlotte 3, N. C.

Booth No. 206

The original autoclaves that create, then store steam under pressure will be demonstrated. Pelton is the originator of the double-jacketed, portable office autoclave that has eliminated waiting time between sterilizing cycles.

Only in Pelton autoclaves can a mercury column thermometer be installed in the discharge line at a small additional charge to insure accurate reading of chamber temperature.

Pet Milk Company
St. Louis 1, Mo.

Booth No. P-20

We will be pleased to have you stop and discuss the variety of time-saving material available to busy physicians. Our representatives will be on hand to discuss the merits of "Pet" Evaporated Milk for infant feeding and INSTANT "Pet" Nonfat Dry Milk for special diets. A miniature "Pet" Evaporated milk can will be given to all visitors.

Pfizer Laboratories
Brooklyn 6, N. Y.

Booth No. 213

The Pfizer exhibit spotlights its recent and original therapeutic concepts represented by SIGMAMYCIN (Brand of Oleandomycin), a combination of Matromycin and Tetracyclin; and the newest advance in topical corticosteroid therapy, Magnacort and Neo-Magnacort, the first water soluble corticoid. Also MODERIL—Pfizer's new alkaloid of rauwolfia. ATARAXOID, the first and only ataraxic-corticoid, as well as Bonamine and Sterane.

Procter & Gamble Company
Cincinnati 1, Ohio

Booth No. 113



Ivory Soap (Procter & Gamble) offers a series of time-saving leaflet pads for doctors, each pad containing fifty identical tear-out sheets. These sheets, which may be given to patients, contain routine instructions covering six different topics. There are also samples of other free, helpful material prepared especially for physicians.

Professional Management
Battle Creek, Mich.

Booth No. 403



PROFESSIONAL MANAGEMENT
1932-1957

Twenty-five years of business counsel to Michigan physicians.

PM executives will welcome you at
Booth No. 403.

Purdue Frederick Company
New York 14, N. Y.

Booth No. 107

The Purdue Frederick Company will feature: SENOKOT Tablets and Granules—new non-bulk, non-irritating constipation corrective acting selectively on the parasympathetic (Auerbach's) plexus in the large bowel, physiologically stimulating the neuromuscular defecatory reflex.

PRE-MENS—the multidimensional premenstrual tension therapy.

SOMATOVITE—clinically proven to promote weight gain, increase appetite and reduce hyperactivity and restlessness.

SIPPYPLEX—the modern comprehensive therapy for peptic ulcer.

Randolph Surgical Supply Co.
Detroit, Mich.

Booth No. 219

RANDOLPH SURGICAL SUPPLY COMPANY will again exhibit outstanding equipment of latest design. Of particular interest are the new uses for the Barron Food Pump, which will be displayed, and competent personnel will be on hand to answer any questions.

We are looking forward to seeing our many friends again this year.

R. J. Reynolds Tobacco Co.
Winston-Salem, N. C.

Booth No. 501

Welcome to the R. J. Reynolds Tobacco Company Exhibit! You are cordially invited to receive a cigarette case (monogrammed with your initials) containing your choice of CAMEL, WINSTON Filter, Menthol Fresh SALEM, or CAVALIER King Size Cigarettes.

A. H. Robins Co., Inc.
Richmond, Va.

Booth No. 407

Physicians attending the meeting of the Michigan State Medical Society are extended a cordial invitation to visit the exhibit of the products of the A. H. Robins Company.

Experienced medical representatives will be in attendance to welcome you and answer inquiries relative to any of Robins prescription specialties.

J. B. Roerig & Co.
New York 17, N. Y.

Booth No. 217

J. B. Roerig and Company will feature ATARAX, the new "Peace of Mind" drug. It's an all new chemical and is specially indicated for the "more normal" person, to bring relief from the common everyday tensions and anxieties. Co-featured with ATARAX will be BONADOXIN, the anti-emetic for relief of the nausea and vomiting of pregnancy; also effective in postanesthetic nausea and postradiation sickness. Literature and samples available to physicians at the booth which you and your friends are cordially invited to visit.

Ross Laboratories
Columbus, Ohio

Booth No. 418

Ross Laboratories: Current Concepts in Infant Feeding, stressing the critical aspects of preventive care. Your Similac representative will be happy to discuss the role of physiologic feeding in providing good growth, sound development, and optimum clinical benefits. Copies of the latest Ross Pediatric Research Conference Reports are available.

Rupp and Bowman Company
Berkley, Mich.

Booth No. 518

Our representatives, Mr. Tony Ferrara, Mr. Eric T. Goullaud, Mr. Al Hemmingsen, Mr. Alex MacKinnon, Mr. Tony Patti, Mr. Myron Ripp and Mr. Bert Williams will be on hand to greet you and to demonstrate the new Raytheon Electrocardiograph.

Also shown will be surgical instruments, diagnostic instruments and examining room furniture.

Sandoz Pharmaceuticals
Hanover, N. J.

Booth No. 313

Sandoz Pharmaceuticals cordially invites you to visit our display at Booth No. 313.

BELLERGERAL SPACE Tabs assure around the clock

control of functional complaints (example—menopause symptoms) in the periphery where they originate.

CAFERGOT PB, the most effective oral medication for the relief of migraine headache with gastrointestinal disturbance accompanied by tension. SANDOSTENE Space Tabs around the clock control of itching and hay fever.

Any of our representatives in attendance will gladly answer questions about these and other Sandoz products.

W. B. Saunders Company
Philadelphia 5, Pa.

Booth No. P-2

Harold Rozema will again be on hand with the complete Saunders line. Books of particular interest, and just new, include: Cecil & Conn: SPECIALTIES IN GENERAL PRACTICE; Nesselrod: PROCTOLOGY; Mulholland: CURRENT SURGICAL MANAGEMENT; Artz and Reiss: BURNS; and Tracy: THE DOCTOR AS A WITNESS.

Schering Corporation
Bloomfield, N. J.

Booth No. P-8

An informed staff of Schering representatives will welcome the opportunity to discuss the latest therapeutic developments and clinical data on TRILAFON, CHLOR-TRIMETON and the "Meti" drugs.

Julius Schmid, Inc.
New York 19, N. Y.

Booth No. 209

An interesting and informative exhibit featuring RAMSES Flexible Cushioned Diaphragm; RAMSES Vaginal Jelly; VAGISEC jelly and liquid for vaginal trichomoniasis therapy; and XXXX (Fourex) Skin Condoms, RAMSES and SHEIK Rubber Condoms for the control of trichomonal reinfection.

G. D. Searle & Co.
Chicago 80, Ill.

Booth No. P-26

You are cordially invited to visit the Searle booth where our representatives will be happy to answer any questions regarding Searle Products of Research. Featured will be Nilevar, the new anabolic agent; Rolicton, the new safe, nonmercurial oral diuretic; Vallestiril, the new synthetic estrogen with extremely low incidence of side reactions; Banthin and Pro-Banthine, the standards in anti-cholinergic therapy; and Dramamine, for the prevention and treatment of motion sickness and other nauseas.

Smith, Kline & French Laboratories
Philadelphia, Pa.

Booth No. P-5

SKF is proud to attend your meeting.

This year, our exhibit features "Compazine" *Span-sule* capsules, the new sustained release medication producing emotional calm without impairing mental alertness or physical activity.

Visit our booth for the latest information on this unique new tranquilizer.

E. R. Squibb & Sons
New York 22, N. Y.

Booth No. 106

E. R. Squibb & Sons has long been a leader in development of new therapeutic agents for prevention and treatment of disease. The results of our diligent research are available to the medical profession in new products or improvements in products already marketed.

At booth No. 106, we are pleased to present up-to-date information on these advances for your consideration.

The Stuart Company
Chicago, Ill.

Booth No. 310

The Stuart Company invites all physicians attending the Michigan State Medical Society meeting to visit

our booth. Our representatives will be glad to answer any of your questions on our products.

Swift and Company
Chicago 9, Ill.

Booth No. 314

"Fruit Flavored" Meats for Babies—Pork with Apple-sauce, Ham with Raisin Sauce, Lamb with Mint—prepared both for infants and those in the toddler set, is announced by Swift & Company. Designed especially for infants' appetities, these meat preparations are offered for your inspection. See and taste them at the Swift booth.

Testagar & Company, Inc.
Detroit, Mich.

Booth No. 507

Testagar & Co., Inc., is proud to announce that we have assumed the manufacture and sales of the Fellows Medical Manufacturing Corp. line of pharmaceutical specialties in the United States.

The Fellows Medical Manufacturing Corp. was founded in 1866 and is a very fine, ethical pharmaceutical specialty house.

Fellows' Chloral Hydrate products will be featured as well as some new Testagar pharmaceutical specialties.

S. J. Tutag & Company
Detroit, Mich.

Booth No. 207

S. J. Tutag & Company will exhibit Buffonamide, the triple-sulfa suspension that is buffered. The use of sodium citrate as buffering agent with the acet-diamer sulfonamides makes Buffonamide ideal; this formula is less toxic, well-tolerated, readily absorbed, with increased crystalluria protection. The two tasty flavorings, cherry and mixed fruit, of this suspension makes Buffonamide the drug of choice for all ages.

The Upjohn Company
Kalamazoo, Mich.

Booth No. 408

June 3, 1957, marked an important event to a large percentage of diabetics in the United States. On that date ORINASE, the new ORAL anti-diabetic was made available to physicians in the United States. Upjohn representatives will be on hand at Booth No. 408 to discuss ORINASE with visiting physicians along with other Upjohn products of interest.

U. S. Vitamin Corp.
New York, N. Y.

Booth No. P-23

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Yakes Office Supply Company Booth No. 510
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Yorke Publishing Company Booth No. 415
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The Yorke Publishing Company cordially invites you to visit Booth No. 415 where advance information can be had on its newest publication, THE AMERICAN JOURNAL OF CARDIOLOGY, which is to appear in January, 1958. Also prominently displayed are these other publications of the Yorke Group: THE AMERICAN JOURNAL OF MEDICINE; THE AMERICAN JOURNAL OF SURGERY; THE AMERICAN JOURNAL OF CLINICAL NUTRITION; and THE MODERN DRUG ENCYCLOPEDIA.

Zimmer Manufacturing Company Booth No. 402
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Sunday, September 22, 1957

8:00 to 10:00 p.m.

Lobby of Pantlind Hotel

HOTEL RESERVATIONS
MICHIGAN STATE MEDICAL SOCIETY

92nd Annual Session

Grand Rapids, September 25-26-27, 1957

The reservation blank below is for your convenience in making your hotel reservations in Grand Rapids. Please send your application to the Committee on Hotels for MSMS Convention, Pantlind Hotel, Grand Rapids, Michigan. Mailing your application now will be of material assistance in securing hotel accommodations.

As very few singles are available, registrants are requested to co-operate with the Committee on Hotels by sharing a room with another registrant, when convenient.

Committee on Hotels,
 Michigan State Medical Society
 c/o Pantlind Hotel
 Grand Rapids, Michigan

Please make hotel reservation(s) as indicated below:

_____ Single Room(s) _____ persons

_____ Double Room(s) for _____ persons

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Arriving September _____ hour _____ A.M. _____ P.M.

Leaving _____ hour _____ A.M. _____ P.M.

Hotel of First Choice: _____

Second Choice: _____

Names and addresses of all applicants including persons making reservation:

Name	Address	City	State

Date _____ Signature _____

Address _____ City _____

Michigan's Department of Health

Albert E. Heustis, M.D., Commissioner

MICHIGAN-CORNELL AUTOMOTIVE CRASH INJURY STUDY

The Michigan program of research into the nature, extent and cause of injury received in passenger automobile accidents began on June 15, 1957. Nineteen counties in southwestern and central Michigan were chosen as the first sampling areas. These areas will be used for six months. Then and each successive six months for a two-year period different areas have been selected.

The plan is being sponsored in Michigan by the Michigan Department of Health and the Michigan State Police, with the endorsement and cooperation of the Michigan State Medical Society and the Michigan Hospital Association. It is coordinated and directed by Cornell University Medical College as part of an interstate program composed of fourteen states at this time. The study is confined to passenger autos, and in the Michigan study area only to those accidents investigated by the Michigan State Police. Accident reports and photographs are forwarded from participating Michigan State police posts to the East Lansing headquarters, and thence to the Michigan Department of Health. Medical report forms will be delivered to the physician or hospital by state police trooper for each person on whom a report is necessary. When completed, these forms are mailed directly to the Michigan Department of Health as is indicated on the form. They will there be matched with the accident report and photographs, and then sent to Cornell University Medical School for tabulation and study.

When the completed data are assigned numbers at Cornell Medical College, the name of the person is removed from the report and is destroyed. Until that time, the name is essential to insure proper matching. Recent legislation allows the State Commissioner of Health to collect data for research purposes without its becoming an available public record. This, plus the fact the Michigan Department of Health will not make or retain copies of medical reports, insures their confidential nature.

We are all fully cognizant in Michigan of the benefits the passenger automobile has brought us. As physicians, we are also painfully aware it has brought with it a dangerous by-product. This by-product can be classified as a mass traumatic disease which is producing pathologic results for approximately 1,200,000 United States citizens each year. Data from the National Safety Council indicate that probably 100,000 of these more than a million injuries result in permanent disability each year. Statistical data from the Bureau of Vital Statistics of the U. S. Public Health Service reveal it can be said this mass traumatic disease is one of the most likely items to produce death in the ages five through thirty-nine. The motor vehicle actually ranks in first place in ages fifteen through twenty-four.

The primary cause of motor vehicle accidents must be

conceded to be the complex mistakes in human judgment. Because of the complex cause factors, too many for too long have believed there was little which could be done about the inevitable price of accidents in death and injury.

A research group at Cornell University Medical College has been gathering data which could be useful in examining the cause of injury as differentiated from the data which seek to establish the cause of the accident.

If the proper quality and quantity of data on the cause of injury can be gathered, it is known that meaningful correlations can be established between the host who has "traumatic disease" (occupant of the passenger vehicle), the agent which produces the disease (the items observed in the interior of the passenger vehicle), and the environment in which the disease is acquired (the highway or street where the accident occurs).

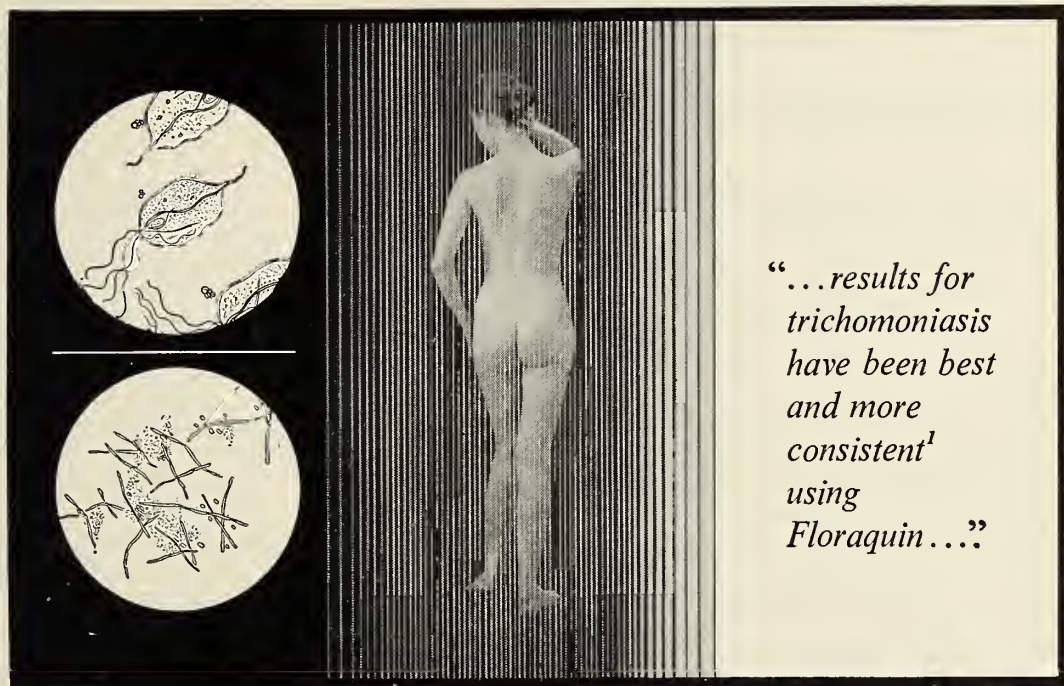
By this epidemiologic approach, it is possible for medical research to find those items which stand most in need of change in the automobile. With conclusive data, the design engineer, the manufacturer, can then make changes which should lead to a calculated reduction in the frequency and the severity of injury or death observed during automobile accidents. This does not preclude continued search for practical solutions to the complex mistakes in human judgment, which are believed to be the primary cause of motor vehicle accidents.

Medicine and its allied sciences are most qualified to apply the scientific disciplines necessary for studying the mass traumatic disease seen in motor vehicle accidents. Although the police reports contain specific information concerning the type of accident, extent of damage to automobile structures, and the mechanical causes of injuries sustained by car occupants, it cannot be expected that troopers can furnish the precise facts as to the nature, location, and extent of injuries which are imperative to the success of this study. In addition, one of the primary objectives of this program is to collect information on automobile accident-injuries and their causes which will be statistically reliable. When a number of medical reports from a sampling are missing, the reliability of the data becomes questionable and the value of the entire state effort is thus materially reduced.

The successful continuation of the present team work by the medical research, and an alert and progressive minded automotive industry promises great hope for the future in controlling the mass disease problem, which today is an outstanding characteristic of our social and economic way of living.

Until the time comes when the causes of cancer are known and preventive programs or specific cures are developed, progress in treatment must depend on earlier detection and prompt and skillful use of known weapons.

EFFECTIVE, DEPENDABLE THERAPY FOR VAGINITIS



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Floraquin[®] eliminates trichomonal and mycotic infection; restores normal vaginal acidity

Leukorrhea is by far the most frequent symptom of vaginitis; trichomonads and monilia are the most common causes. Many authors have reported² trichomonal protozoa in the vagina of 25 per cent of obstetric and gynecologic patients. Increased use of broad spectrum antibiotics has resulted in a sharp rise in the incidence of monilial infections.

Floraquin effectively eradicates both trichomonal and monilial vaginal infections through the action of its Diodoquin[®] content. Floraquin also furnishes boric acid and sugar to restore the normal vaginal acidity which inhibits patho-

gens and favors the growth of protective Döderlein bacilli.

Pitt¹ recommends vaginal insufflation of Floraquin powder daily for three to five days, followed by acid douches and the daily insertion of Floraquin vaginal tablets throughout one or two menstrual cycles. G. D. Searle & Co., Chicago 80, Illinois. Research in the Service of Medicine.

1. Pitt, M. B.: Leukorrhea. Causes and Management, J. M. A. Alabama 25:182 (Feb.) 1956.

2. Parker, R. T.; Jones, C. P., and Thomas, W. L.: Pruritus Vulvae, North Carolina M. J. 16:570 (Dec.) 1955.

SEARLE

Important Announcement of Arteriosclerosis Treatment

GEROT PHARMACEUTIKA, owners of United States Letters Patent #2-776-973 issued January 1957 to Gerhard Gergely of Vienna, Austria, have licensed MEYER AND COMPANY of Detroit, Michigan, to synthesize and market 3, 7-dimethyl-xanthine double salt in the United States of America.

3, 7-dimethyl-xanthine double salt with oleic acid and magnesium, a stable compound marketed in Austria since 1950 under the name "Perskleran" and used in the treatment of ARTERIOSCLEROSIS is being marketed by MEYER AND COMPANY under the trade name of "Athamol."

The product is now available in tablet form.

Literature and clinical samples are available on request.

MEYER AND COMPANY

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In Memoriam

Douglas R. Coyne, M.D., aged fifty-eight, Detroit physician for thirty-two years, died June 1, 1957. Dr. Coyne was a member of Detroit Commandery No. 1, Knights Templar, and Lincoln Park Lodge No. 539, F. & A. M.

Mark E. Maun, M.D., aged forty-seven, Grosse Pointe Park, was director of the Owen Chemical Laboratory in the David Whitney Building for the past ten years. He was a director and organizer of the Metropolitan Hospital, Doctors Hospital and St. Clair Hospital, and served as consultant pathologist at Jennings, St. Joseph, Deaconness and St. Mary's Hospitals. A graduate of Northwestern University College of Medicine in 1936, he was associate professor of pathology at Wayne State University from 1938-1945. He died on May 20, 1957.

Buell H. Van Leuven, M.D., aged sixty-nine, Petoskey surgeon for thirty years, died June 18, 1957, at Munson Hospital. Dr. Van Leuven was a former public health officer and mayor of Petoskey. He served as a Councilor of MSMS for five years in the early forties.

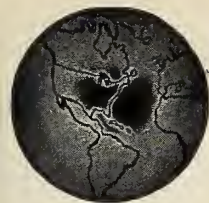
Norman D. Wilson, M.D., aged eighty-five, Jackson physician, graduated from Lennox College, Iowa, in 1911 and attended the Georgian Eclectic College of Medicine and Surgery. Dr. Wilson began his practice in Jackson in 1924. He was long active in the Kiwanis Club. He originated a depression time agriculture project which encouraged unemployed persons to produce their own vegetables. On November 11, 1949, he was presented a plaque by the Kiwanis Club and 4-H organizations for his service to youth clubs. Dr. Wilson was a life member of the Jackson County Medical Society, Masonic orders, Kiwanis and High 12 clubs, and a member of the First Methodist Church. He died June 13, 1957.

AMA NEWS NOTES

(Continued from Page 960)

see the warm, human story of the home and professional life of William Phillips, M.D. You'll learn about the many ways the radiologist uses x-ray in diagnosis and therapy. You'll watch the doctor apply his special knowledge to meet critical situations. The film was produced by E. I. du Pont Nemours & Co., Inc., in cooperation with the American College of Radiology.

Medical societies may arrange for bookings through the Film Library. The film will be particularly suitable for school, club and other public gatherings.



. NEWS MEDICAL

MICHIGAN AUTHORS

Ellis J. Van Slyck, M.D., F.C.C.P., Detroit, is the author of an article entitled, "Diffuse Interstitial Pulmonary Fibrosis (Hamman-Rich Syndrome): Diagnosis by Lung Biopsy; Treated with Cortico-Steroids," published in *Diseases of the Chest* Official Journal of the American College of Chest Physicians, May, 1957.

Herbert Rosenbaum, M.D., Detroit, is the author of an article entitled, "Highlights 1957 Meeting, American College of Physicians," published in *Harper Hospital Bulletin*, May-June, 1957.

Hermann Pinkus, M.D., Detroit, is the author of an article entitled, "The Problem of Multicentricity In Skin Cancer," published in the *Wayne State University College of Medicine Bulletin*, Vol. 4, No. 1, June 1957.

Ronan O'Rahilly, M.D., Detroit, is the author of an article entitled, "Reflections on Histology and Embryology," published in *Wayne State University College of Medicine Bulletin*, June, 1957.

K. L. Krabbenhof, M.D., Detroit, is the author of an article entitled, "The Present Status of Radioisotopes In Medicine," published in *Harper Hospital Bulletin*, May-June, 1957.

R. J. Whitty, M.D., Detroit, is the author of an article entitled, "Prolapse and Proctentia of the Rectum In Children," published in *Harper Hospital Bulletin*, May-June, 1957.

Harvey Krieger, M.D., Detroit, is the author of an article entitled, "Papanicolaou Smears In The Diagnosis of Premature Rupture Of The Amniotic Sac," published in *Harper Hospital Bulletin*, May-June, 1957.

Lloyd J. Lemmen, M.D., Pittsburgh, Wallace W. Tourtellotte, M.D., James E. Higgins, B.A., and Julius A. Parker, B.A., Ann Arbor, are the authors of an article entitled, "Study of Cerebrospinal Fluid Proteins with Paper Electrophoresis," published in the *University of Michigan Medical Bulletin*, May, 1957.

B. I. Hirschowitz, M.D., C. W. Peters, Ph.D., and L. E. Curtiss, LSA '58, Ann Arbor, are the authors of an article entitled, "Preliminary Report on a Long Fiberscope for Examination of Stomach and Duodenum," published in the *University of Michigan Medical Bulletin*, May, 1957.

James C. Breneman, M.D., Galesburg, is the author of an article entitled, "Clinical Use of Tolbutamide (Orinase) In Office and Home Care of Diabetics," published in the *Journal of the American Medical Association*, June 8, 1957.

L. Burton Parker, M.D., Indianapolis, and Leonard F. Bender, M.D., Ann Arbor, are the authors of an article entitled, "Problem of Home Treatment in Arthritis," read at the 34th Annual Session of the American

Congress of Physical Medicine and Rehabilitation, Atlantic City, September, 1956, and published in *Archives of Physical Medicine and Rehabilitation*, June, 1957.

John M. Weller, M.D. and Henry K. Schoch, M.D., Ann Arbor, are the authors of an article entitled, "The Pathogenesis, Clinical Course, and Treatment of Acute Renal Insufficiency," published in the *University of Michigan Medical Bulletin*, May, 1957.

Brian F. McCabe, M.D., Ann Arbor, is the author of an article entitled, "Unilabyrinthine Crisis Without Vertigo," published in the *University of Michigan Medical Bulletin*, May, 1957.

Michael H. Lashmet, Ann Arbor, Clifford W. Gurney, M.D., Chicago, and William H. Beierwaltes, M.D., Ann Arbor, are the authors of an article entitled, "Thyroid Response to TSH in Normal Human Subjects," published in the *University of Michigan Medical Bulletin*, May, 1957.

Roger F. Milnes, M.D., and Rients Vander Woude, M.D., Ann Arbor, are the authors of an article entitled, "A Stainless Steel Disc Oxygenerator for Cardiac Bypass," published in the *University of Michigan Medical Bulletin*, May, 1957.

Roger F. Milnes, M.D., Rients Vander Woude, M.D., Joe D. Morris, M.D., and Herbert Sload, M.D., Ann Arbor, are the authors of an article entitled "Induced Asystole for Open Cardiomy," published in the *University of Michigan Medical Bulletin*, April, 1957.

Robert J. Bolt, M.D., William S. Wilson, M.D., and H. Marvin Pollard, M.D., Ann Arbor, are the authors of an article entitled, "Gastric Ulcer: Evaluation of Methods of Treatment," published in the *University of Michigan Medical Bulletin*, April, 1957.

Lloyd J. Lemmen, M.D., Pittsburgh, Wallace W. Tourtellotte, M.D., Janice G. Glimm, James E. Higgins, Julius A. Parker, B.A., Ann Arbor, are the authors of an article entitled, "Study of Cerebrospinal Fluid Proteins with Paper Electrophoresis IV. Methods for Concentrating Dilute Protein Solutions," published in the *University of Michigan Medical Bulletin*, April, 1957.

John B. Stetson, M.D., Ann Arbor, is the author of an article entitled, "Resuscitation Under Anesthesia: Some Interesting Early Reports," published in the *University of Michigan Medical Bulletin*, April, 1957.

J. C. Breneman, M.D., of Galesburg, Michigan, is author of an original article "Clinical Use of Tolbutamide (Orinase) in Office and Home Care of Diabetics" which appeared in the *Journal of the American Medical Association*, June 8, page 627.

Samuel J. Levin, M.D., Detroit, is author of an original paper "Prednisone in the Treatment of Allergic

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Walter E. Green, M.D., Superintendent and Medical Director.



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Diseases in Children" presented at the AMA Annual Session in New York, June 5.

* * *

Borden Awards.—A total of 254 senior medical students have received \$500 Borden Undergraduate Research Awards in Medicine over the past thirteen years. This is reported in a new Borden Company Foundation directory which, for the first time, lists all the college and university scholarship awards and prizes sponsored by the foundation. The awards, at twenty-six schools, are for senior medical students whose research as undergraduates has been deemed to be the most meritorious in their class.

The basic purpose of the program is to furnish incentive for high scholastic attainment and to dramatize the importance of such attainment.

Schools at which these medical awards are made are: University of California, University of Chicago, University of Cincinnati, Columbia University, Cornell University, Duke University, Harvard Medical School, University of Illinois, State University of Iowa, Johns Hopkins University, University of Michigan, University of Minnesota, New York University, Northwestern University, Ohio State University, University of Pennsylvania, University of Rochester, Saint Louis University, Stanford University, University of Texas, Tulane University, Vanderbilt University, Washington University, Western Reserve University, University of Wisconsin, and Yale University.

In all instances the colleges select the award students and administer the grants.

Joint Session.—Sight-saving and inter-American friendship were twin objectives at the joint session of the Fourth Interim Congress of the Pan American Association of Ophthalmology and the annual conference of the National Society for the Prevention of Blindness (U. S.), held in New York City, April 7-10, 1957. More than 1,000 persons devoted to the saving of sight registered for the Congress. Of 540 who attended the Pan American Association's session, same 400 were practicing ophthalmologists and seventy-four were residents in ophthalmology.

Sixty-six ophthalmologists represented the Latin American countries—Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Cuba, Dominican Republic, El Salvador, Jamaica, Mexico, Nicaragua, Panama, Paraguay, Puerto Rico, Uruguay and Venezuela. Seven come from Canada and one from the Virgin Islands. The annual conference of the National Society for the Prevention of Blindness attracted some 500 physicians, nurses, educators and volunteer workers.

Mayor Robert F. Wagner of New York urged that in order to stem the tide of loss of sight, "each physician's office, each clinic and each hospital become a screening site for early recognition of diseases of the eye" with referral to ophthalmologists for specialized care.

The opening session was the scene of the presentation of Leslie Dana Gold Medals for the Prevention of Blindness to two distinguished leaders: Mrs. Eleanor Brown Merrill, formerly Executive Director of the National

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Society, now living in Baltimore; and Miss Evelyn Carpenter, formerly Executive Secretary of the Philadelphia Committee for the Prevention of Blindness. The Dana Medal is awarded by the St. Louis Society for the Blind.

The scientific sessions of the two organizations were held separately. The Pan American Association held symposiums in the mornings, Monday through Wednesday. These dealt with diseases of the ocular fundus, ocular surgery and ocular therapy.

Dr. H. Saul Sugar, Detroit, was one of the speakers. His subject was "Coats' Disease."

The Association's next assembly, a Caribbean cruise congress, is scheduled for February 1-14, 1958. More than 300 have already made reservations for the cruise, which will be held aboard the Queen of Bermuda. Dr. William L. Benedict, Rochester, Minnesota, is chairman of the organizing committee. A program of lectures, seminars and motion pictures is being planned for sessions to be held on shipboard. The party will visit San Juan, Puerto Rico; Ciudad Trujillo, Dominican Republic; Kingston, Jamaica; Port-au-Prince, Haiti; and Nassau in the Bahamas. Information about the cruise may be obtained from the travel agent, Mr. Leon V. Arnold, 33 Washington Square West, New York 11, New York.

Dr. J. Wesley McKinney, Memphis, is Executive Secretary of the Association for countries north of Panama, and Dr. Jorge Balza, Buenos Aires, for South of Panama.

Lewis Cohen, M.D., presented an exhibit on "Electrovasography: Quantitative Diagnosis in Vascular Disorders" at the annual meeting of the American Medical Association in New York June 3-7, 1957. The exhibit was awarded a Certificate of Merit in the Physical Medicine section.

* * *

University of Michigan Television.—A program in the television series, "Doctors for Michigan," appeared on the Lansing station, July 28, Sunday, 11:30 A.M. The Kalamazoo station will also carry a program in this series sometime in August.

* * *

Aging.—To avoid shaky hands and a tottering gait in later life give up your coffee break for a brief walk or some other good exercise, is the advice of Frederick C. Swartz, M.D., of Lansing.

Dr. Swartz told a workshop session of the U-M's tenth anniversary Conference on Aging that physical exercise "begun early in life and continued into the advanced years is capable of delaying the physical stigma of aging and prolonging life expectancy as much as eight to ten years." If begun early in life, walking and other forms of daily physical exercise can ward off symptoms of bursitis, myositis, and fibrositis, Dr. Swartz indicated. "These represent degenerative rather than inflammatory processes. What one sees under the microscope . . . is the result of lack of activity and function."

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The Wassermann and Kahn Tests
Blood Chemistry
Bacteriology and Clinical Pathology
Basal Metabolism
Aschheim-Zondek Pregnancy Test
Intravenous Therapy with rest rooms for Patients
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Central Laboratory

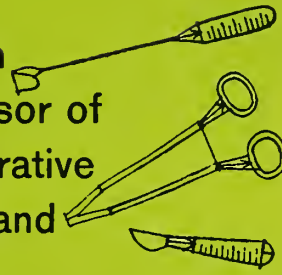
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The Twenty-Second Annual Congress of the United States and Canadian Sections of the International College of Surgeons will be held at the Palmer House, Chicago, September 8-12, 1957.

* * *



Tuberculosis infection rates were found to be 42 per cent among adults over fifty-five and 1.5 per cent among children under ten in a mass tuberculin testing program conducted last year in Arenac County. The infection rate for the county as a whole was estimated to be 19 per cent. A total of 5,362 persons—more than half of the county's population—were checked with the Mantoux tuberculin test.

"In the future, tuberculin tests probably will have a prominent place in case finding," Dr. C. M. Sharp, director of the Bureau of Tuberculosis Control for the Florida State Board of Health, predicted in the National Tuberculosis Association Bulletin. "This test is a sensitive epidemiological barometer, especially when used in young children with limited adult contact. When the infection rate in the population decreases to a sufficiently low degree, as it has already done in some sections of the midwest, tuberculin-testing surveys of the general school and adult population may eventually be our most economical and productive case-finding technique."

1064

Research Awards Announced.—Award of thirty-one unclassified life science research contracts in the fields of medicine, biology, biophysics and radiation instrumentation was announced by the U. S. Atomic Energy Commission. The contracts were awarded to universities and private institutions as part of the AEC's continuing policy of assisting and fostering research and development in fields related to atomic energy as specified in the Atomic Energy Act of 1954, and as amended in 1956.

The Michigan awards, which are for one year, are as follows:

Kresge Eye Institute: Effects of Neutrons and Other Radiations on the Ocular Lens. V. E. Kinsey, \$11,790.00.

University of Michigan: Immunological Study of Tumors. W. J. Nungester, \$25,000.

Parke, Davis and Company: Factors Elaborated by Animal Tissues Which Stimulate Rate of Regeneration of Hematopoietic Organs of Animals Exposed to Total Body Irradiation with Gamma Rays. J. K. Weston, \$80,000.

* * *

The American Association of Physicians and Surgeons has announced its 1958 Essay Contest for high school students with a choice of two subjects: "The Advantages of Private Medical Care," or "The Advantages of the American Free Enterprise System." County, state, and auxiliary medical societies are invited to sponsor these contests. This is the twelfth Annual contest held under the auspices of this organization.

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The National Association For The Prevention Of Tuberculosis and Diseases of the Chest and Heart, incorporating the Annual Conference of the British Tuberculosis Association, announces that its next Conference will be held in London from July 1 to July 4, 1958. The last conference was held in 1955 and was attended by 1,700 representatives from sixty countries.

* * *

M. K. Newman, M.D., Detroit, addressed the Physical Medicine Section of the American Medical Association in New York City on June 6, 1957. The title of his paper was, "Electromyographic Examination and its Clinical Application in Muscular Atrophies." On June 7, 1957, at the New York State Rehabilitation Hospital at Haverstraw, New York, he presented a seminar in "Diagnosis and Management of Muscular Atrophies." In Detroit on June 18, 1957, at the Jewish Home for the Aged, he presented a discussion on "Activity Participation in the Home for Happier Living."

* * *

Mount Sinai Hospital, New York, in affiliation with Columbia University, is offering postgraduate courses in Clinical Medicine for practitioners. These courses are not designed for the purpose of training physicians to become specialists, but are designed to offer the facilities of the Mount Sinai Hospital for continuation training and advanced experience in the clinical fields of medicine. Detailed information regarding the courses may be obtained by applying to the Registrar for Postgraduate Medical Instruction at the Mount Sinai Hospital, Fifth Avenue and One-hundredth Street, New York 29, New York.

* * *

Participants in the 10th Anniversary Conference on Aging at the University of Michigan on June 25, 1957, at Ann Arbor, included M. K. Newman, M.D., Detroit, who discussed "Physical Rehabilitation in Pre-Retirement Conditioning."

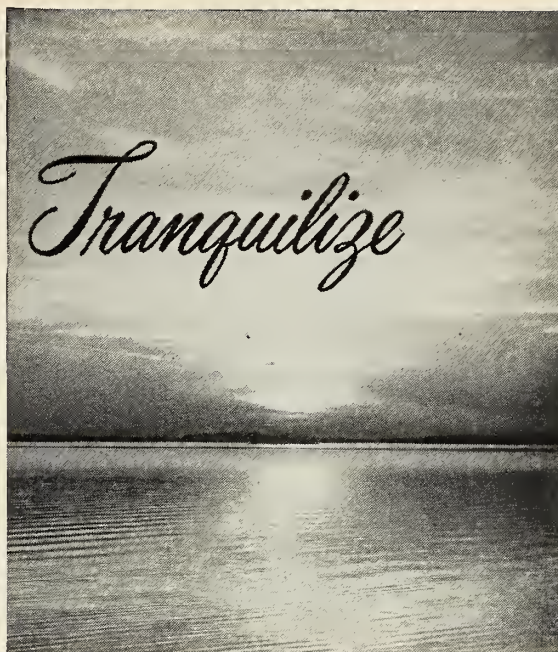
* * *

American Board of Obstetrics and Gynecology.—Applications for certification (American Board of Obstetrics and Gynecology), new and reopened, Part I, and requests for re-examination Part II are now being accepted. All candidates are urged to make such application at the earliest possible date. Deadline date for receipt of applications is September 1, 1957. No applications can be accepted after that date.

Candidates for admission to the Examinations are required to submit with their application, an unbound 8½ x 11" typewritten list of all patients admitted to the hospitals where they practice, for the year preceding their application, or the year prior to their request for reopening of their application. This information is to be attested to by the Record Librarian, Superintendent, or Director of the hospitals where the patients are admitted. Current Bulletins outlining present requirements may be obtained by writing to Robert L. Faulkner, M.D., Secretary, 2105 Adelbert Road, Cleveland 6, Ohio.

AUGUST, 1957

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The American College of Surgeons will hold its 43rd Annual Clinical Congress at Atlantic City, October 14-18, 1957. They have invited students from thirty-six medical schools to attend, and published the names. No one is listed from Michigan. It is hoped to stimulate special interest by offering the papers and attention from famous leaders in surgery. Under supervision, the students will attend a number of special lectures in addition to the scheduled program.

* * *

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* * *

Harry M. Nelson, Jr., M.D., son of Dr. and Mrs. Harry M. Nelson, Detroit, was awarded the William H. Honor Memorial Award for excellence in the study of surgery during the recent Wayne State University College of Medicine's Convocation, June 13. Lewis P. Sonda, Jr., M.D., received a specially inscribed scroll from the senior class in recognition of service. Dr. Sonda is a son of L. Paul Sonda, M.D., Detroit. Loren W. Shaffer, M.D., Detroit, administered the Oath of Hippocrates to the sixty-three men and two women graduates.

The National Society for Crippled Children and Adults will hold its annual convention October 31-November 2 at the Palmer House, Chicago. For program and information, write James B. Johnson, M.D., 11 South LaSalle Street, Chicago, Illinois.

* * *

A medical history of the Copper Country was published in the *Daily Mining Gazette*, Houghton, during the June Upper Peninsula Medical Society's meeting. The interesting sketch of past medical days in that history-packed region of Michigan was prepared by Simon Levin, M.D., of Houghton. The story included pen sketches on such interesting medical giants of the past as E. T. Abrams, M.D., Philip D. Bourland, M.D., W. H. Matchette, M.D., and R. B. Harkness, M.D.

* * *

The Detroit Branch of the American Urological Association announces its new officers for the year: President, Robert P. Lytle, M.D., Detroit; President-Elect, Harold V. Morley, M.D., Detroit; Secretary-Treasurer, A. Waite Bohne, M.D., Detroit.

* * *

"People to People" is what President Eisenhower called CARE, the great international relief agency which not only sends CARE food packages to the needy in other countries but sponsors the donation of every article that will help professional and trade people in those states. Medical books for doctors and nurses, nets for refugee Chinese fishermen, a plow for a farmer, a tool that will double or treble his harvest and replace his ancient crooked stick—all are requested by CARE, for shipment overseas. If you can help, direct your inquiry to CARE, Washington 6, D. C.



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"The Code of Hammurabi" is the name of the second painting in the Parke Davis & Company series depicting the history of medicine. In this full-color oil painting, a Babylonian physician defends his professional practices against the complaint of a dissatisfied patient seeking invocation of the Code of Hammurabi. The ancient king's code established physicians' fees for services and severe penalties for neglect of duty. This critical drama of medicine 4000 years ago was painted by artist Robert Thom of Birmingham, Michigan. The painting was displayed for the first time at the recent AMA Annual Meeting in New York.

* * *

The Ohio Academy of General Practice announces its Seventh Annual Scientific Assembly at the Franklin County Veterans Memorial in Columbus, Ohio, September 18-19, 1957. For program, write Earl D. McCallister, M.D., 209 S. High Street, Columbus 15.

* * *

Looking back: In 1927, some wise economists warned of business recession one or two years ahead. The Sacco-Vanzetti case made headlines the world over. Henry Ford put out his new Model A. A new toy, called television, was demonstrated but was not very practical. Charles Lindberg flew the Atlantic in May and became a hero overnight.

1937: Roosevelt at the peak of his career, tried to pack the Supreme Court and also purge certain members of his party (beaten at both). Rising prices on one hand and first signs of an economic slide on the other.

1947: Taft-Hartley Law enacted. The first of the huge foreign aid programs inaugurated—Marshall Plan.

* * *

During the World Congress of Gastroenterology to be held in Washington, D. C., May 25-31, 1958, the official languages will be English, French and Spanish—rendered in simultaneous translation. Adequate space for

AUGUST, 1957

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1. Pollock, B. E., and Pruitt, F. W.: *Am. J. M. Sc.*, 226:172, 1953.

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* * *

The Sixth Conference on Physicians and Schools, sponsored by the AMA, will be held at the Lorraine Hotel, Highland Park, Illinois, on October 30-November 2, 1957.

* * *

The Olin Memorial Health Center and Hospital of Michigan State University, recently enlarged into a \$2,500,000 building, was dedicated June 13. Facilities of the Hospital were increased from seventy-two to 129 beds, capable of servicing MSU's anticipated enrollment of 30,000 in the next ten years. **C. G. Menzies, M.D.**, Lansing, is Medical Director of the Olin Memorial Center.

* * *

The American Psychiatric Association announces the award of nineteen Smith, Kline and French Laboratory Fellowships in Psychiatry. These projects, for 34 undergraduates in medical school, will range from a study of the chemical functionings of the brain to an analysis of Seattle's high suicide rate. The awards totaled \$16,733. For information write **Kenneth E. Appel, M.D.**, Chairman, Fellowship Committee, Box 7929, Philadelphia, Pennsylvania.



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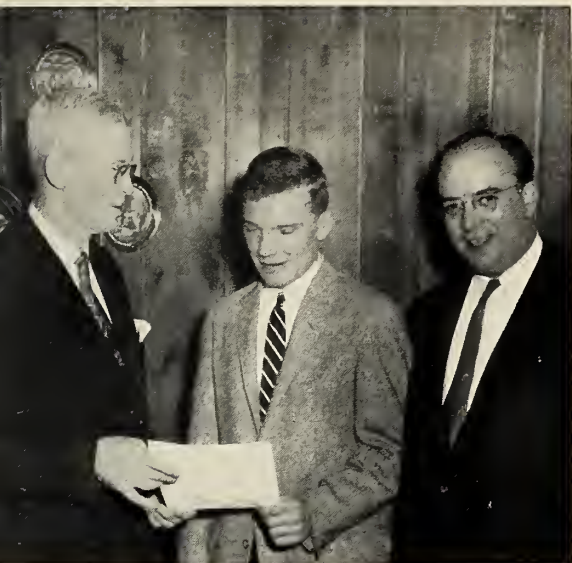
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*REFERENCE: J.A.M.A. 163: 359, 1957 (February 2)



Richard A. Ferrington, M.D. (center) was recipient of a \$1,000 Award for Graduate Training in General Practice. The certificate was presented by E. Clarkson Long, M.D., Detroit, secretary of the Michigan Academy of General Practice, at the May 27 meeting of the Midland County Medical Society. Also pictured is Charles M. Coffman (right), representative of the Mead Johnson Company which provides the funds for the award.

* * *

Meyer Perlstein, M.D., Chicago, held a cerebral palsy clinic for the Michigan Society for Crippled Children and the Michigan Commission for Crippled Children in Kalamazoo on August 20 and 21, 1957.

* * *

The New York Academy of Medicine announces a Postgraduate Week, October 7-11, with daily evening lectures, afternoon panel meetings, and a scientific exhibit on "Research Contributions to Clinical Practice." For complete program and information, write the Academy at 2 East 103rd Street, New York 28.

* * *

Dr. E. C. VonderHeide has been appointed Medical Consultant in the Research Division and Dr. J. K. Weston is now Director of the Clinical Investigation Department of Parke Davis & Company, Detroit. Congratulations!

* * *

Dr. Reuben L. Kahn, world-famous discoverer of the Kahn blood test for syphilis, has officially retired at the University of Michigan after twenty-nine years of service. But the U. of M. will continue Dr. Kahn as Research Consultant in the Department of Dermatology and Syphilology. Congratulations, Dr. Kahn, on a fruitful life—beneficial to millions of persons throughout the world.

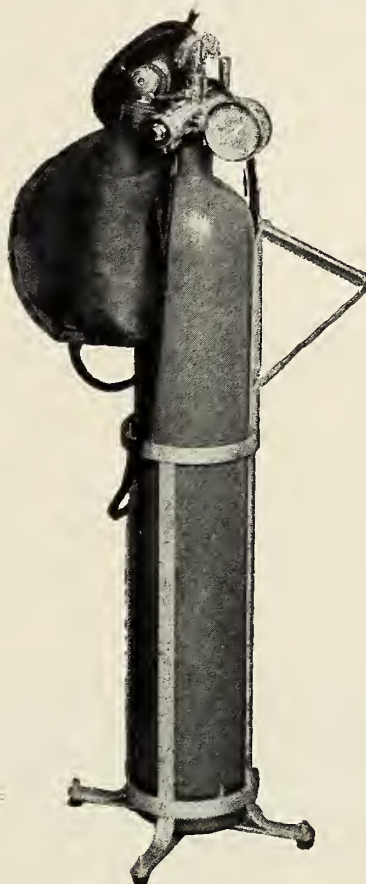
* * *

Winthrop N. Davey, M.D., of Ann Arbor was elected Governor of the American College of Chest Physicians for Michigan at its recent New York City annual meet-

August, 1957

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ing. New Fellows from Michigan include: **John L. Isbister, M.D.**, Lansing; **Edna M. Jones, M.D.**, Northville; **Richard A. Rasmussen, M.D.**, Grand Rapids; **Ellis J. VanSlyck, M.D.**, Grosse Pointe; and **Robert F. Ziegler, M.D.**, Detroit.

* * *

Horace Wray Porter, M.D., Jackson, Chairman of the MSMS Ethics Committee, participated on a panel on ethics with **Milton L. Davidson**, an attorney from Jackson, and **G. E. Snyder**, a professional engineer from Jackson, at the annual meeting of the Society of Professional Engineers held in Jackson, June 21-22. **Michael Kolivosky**, presently professor of sociology at Hillsdale College, acted as moderator.

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"Immunization Information for International Travel" is the title of a good booklet published recently by the Department of Health, Education and Welfare, Public Health Service. For copies write the Superintendent of Documents, Government Printing Office, Washington 25, D. C. (25c per copy).

* * *

The South Dakota State Medical Association is sponsoring a Fall Hunter's Medical Meeting, October 26-30, in Mitchell, South Dakota. The meeting is limited to 100 out-of-state doctors of medicine. Registration fee of \$100.00 includes hunting license, hunting grounds and guides, scientific sessions and four dinners. If wives come with husbands and hunt, the registration fee is the same for each; if wives do not hunt, their registration fee is \$75.00. A special motel has been reserved by the SDMA for out-of-state physicians. For information and registration blank, write **John C. Foster**, Executive Secretary, South Dakota State Medical Association, 300 First National Bank Building, Sioux Falls, South Dakota.

THE PROBLEM OF THE BIOLOGIC FALSE POSITIVE SEROLOGIC TEST FOR SYPHILIS

(Continued from Page 1016)

3. Portnoy, Joseph, and Magnuson, Harold J.: Immunologic studies with fractions of virulent *Treponema pallidum*. J. Immunol., 75:348 (Nov.) 1955.
4. Moore, Joseph E., and Lutz, W. Beale: The natural history of systemic lupus erythematosus: an approach to its study through chronic biologic false positive reactors. J. Chron. Dis., 1:297 (March) 1955.
5. Curtis, Arthur: Personal communication (Department of Dermatology, University Hospital, Ann Arbor, Michigan).
6. Harvey, A. McGehee, et al: Systemic lupus erythematosus: review of the literature and clinical analysis of 138 cases. Medicine, 33:291, 1954.

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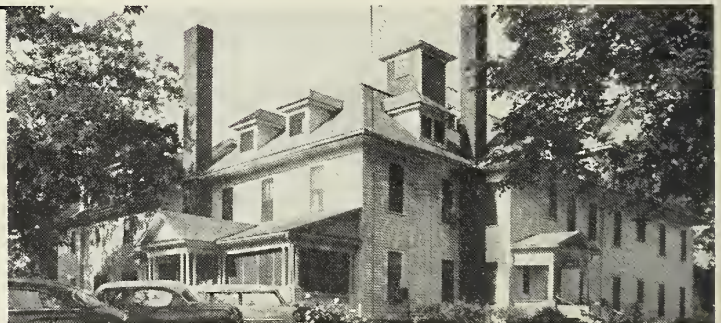
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Acknowledgments of all books received will be made in this column, and this will be deemed by us as full compensation to those sending them. A selection will be made for review, as expedient.

EPILEPSY. Grand Mal, Petit Mal, Convulsions. By Letitia Fairfield, C.B.E., M.D., D.P.H. New York, N. Y.: Philosophy Library, Inc. Price \$4.75.

The problems and the questions arising in the treatment of epilepsy are numerous and, fortunately, are sometimes only the result of a simple lack of knowledge on the part of the patient or his family. In a straightforward and well organized fashion, the author of this volume has presented an excellent review of the nature and the treatment of this disorder. In addition, there are chapters on the problems arising in infancy and childhood; problems arising in relation to employment; and problems arising in the areas of driving licensure and criminal responsibility.

Though the book was written primarily for the British patient and his family, the information is applicable to the American patient as well. The book is highly recommended for all those lay persons who need a good sound knowledge of this disorder.

F.M.

PRACTICAL GYNECOLOGY. By Walter J. Reich, M.D., F.A.C.S., F.I.C.S., Attending Gynecologist and Section Chief, Fantus Clinics of the Cook County Hospital; Attending Gynecologist, Cook County Hospital; Professor of Gynecology, Cook County Graduate School of Medicine; Assistant Professor of Obstetrics and Gynecology, Chicago Medical School; Attending Gynecologist and Obstetrician and Former Chairman of the Department, Grant Hospital; Consulting Gynecologist, Oak Forest Infirmary, Oak Forest Tuberculosis Hospital; Hazelcrest General Hospital, Fox River Tuberculosis Sanatorium, Geneva Community Hospital, and Mitchell J. Nechtow, M.D., F.A.C.S., F.I.C.S., Associate Attending Gynecologist, Cook County Hospital and Fantus Gynecologic Clinic; Associate Professor of Gynecology and Obstetrics, Chicago Medical School; Associate Professor of Gynecology, Cook County Graduate School of Medicine; Attending Gynecologist, Northwest Hospital; Chief of Gynecology and Obstetrics, Norwegian-American Hospital. Second Edition. 284 Illustrations, including sixty-eight Subjects in Color. Philadelphia and Montreal: J. B. Lippincott Company. Price \$12.50.

The first edition of *Practical Gynecology* which appeared in 1950 was an authoritative, well written, well illustrated quick reference designed for the general practitioner. This second edition is still more comprehensive, being expanded with nine chapters of new material.

The added chapters discuss pediatric gynecology, diagnosis of early pregnancy in problem cases, radiation therapy in gynecology, geriatric gynecology, and pitfalls in diagnosis.

Usefulness of the book has been enhanced by careful revisions. There is added emphasis to the relation of the acute gynecologic abdomen and the gastrointestinal and genitourinary systems. Malignancy of the ovary

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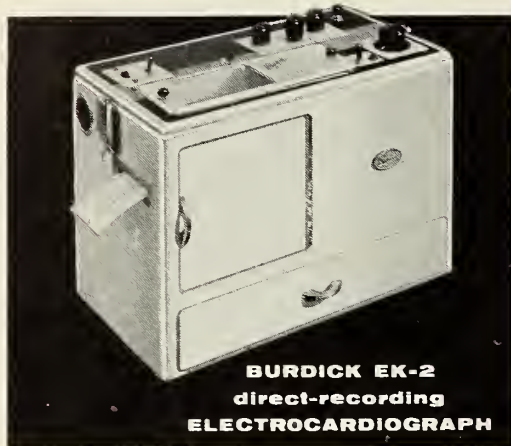
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and the importance and usefulness of the Papanicolaou stain are discussed more fully than in the earlier edition. The fern test is described and its multiple uses in the office explained. The importance of frequent breast examinations during prenatal and postnatal periods is emphasized.

The entire book is as practical, as its title claims. Its organization, conciseness, and numerous illustrations make it especially useful.

S.T.L.

THE ART OF COMPOUNDING (Scoville's). By Glenn L. Jenkins, Dean and Professor Chemistry, Purdue University School of Pharmacy, Lafayette, Indiana; Don E. Francke, Chief Pharmacist, University Hospital, University of Michigan, Ann Arbor, Michigan; Edward A. Brecht, Dean and Professor of Pharmacy, University of North Carolina, School of Pharmacy, Chapel Hill, North Carolina; and Glen J. Sperandio, Associate Professor of Pharmacy, Lafayette, Indiana. Ninth Edition New York, Toronto, London: The Blakiston Division, McGraw-Hill Book Company, Inc., 1957. Price \$11.00.

Compounding used to be taught in our father's and grandfather's courses in medicine, but is now assumed to be done. This book by four authors, one being Don E. Francke, D.Sc., Chief Pharmacist at the University Hospital, University of Michigan, gives a complete description and discussion of the art. Some hospitals have need for this service and probably most of them should, but doctors have formed the habit of ordering pharmaceuticals already compounded. On occasions, however, it is deemed necessary to compound one's own and it is well for our doctors to understand much of the compounding art. Such knowledge avoids use of incompatible prescriptions with which our pharmaceutical suppliers are already familiar. This book has much useful information.

RYPIN'S MEDICAL LICENSURE EXAMINATIONS. Topic Summaries and Questions. By Walter L. Biering, M.D., M.A.C.P., M.R.C.P., Edin. (Hon.), Former Member, National Board of Medical Examiners, American Board of Internal Medicine, Iowa State Board of Medical Examiners; Iowa State Commission of Health; Professor Emeritus, Theory and Practice of Medicine; College of Medicine, State University of Iowa; Secretary, Federation of State Medical Boards of the United States; Chairman (Hon.), 1933-53, American Board of Preventive Medicine, Inc.; Director, Division Gerontology, Heart and Chronic Diseases, Iowa State Dept. of Health. With the collaboration of a Review Panel. Eighth Edition. Philadelphia and Montreal: J. B. Lippincott Company. Price \$10.00.

The State Board of Licensure examinations face every medical student and each one is concerned with passing them. This book is developed on the questions asked over a term of years at various times, giving an adequate discussion of each topic in the usual fields. The final few pages of each section are questions and acceptable answers. There is also a field glossary and alphabetical index. The book is well conceived and will be found very useful.

JMSMS

OUTCOME OF IOWA LITIGATION

(Continued from Page 968)

ology were specialties within the practice of medicine; (b) the practice of medicine requires qualifications which cannot be met by a corporation; (c) that pathologists were violating the law in Iowa by permitting hospitals to render bills for their services without the patients' consent.

This decision was appealed to the state supreme court; it is presumed that this appeal will now be withdrawn, inasmuch as the new law is based on a joint agreement (declaration) between the hospital trustees and the physicians of that state.

Such a legal battle is a sorry way to settle disagreements arising from the rendering of medical services. Poorer public relations cannot be imagined. Bitterness and antagonism cannot solve such problems. The hospitals and physicians need each other and a wholesome regard and respect, mutually held, is essential. It is hoped that the physicians and hospitals in Iowa, and elsewhere, will work harmoniously within the spirit of this new legislation. O.A.B. in *Detroit Medical News*, April 22, 1957.

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Mr. W. J. Burns, Executive Secretary
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Dear Mr. Burns:

On behalf of the staff and members of the State Committee of the Medical Advisory Committee to the Selective Service System, I wish to express appreciation for the co-operation, interest and assistance rendered this office through the years 1950 to date. As you know, the Doctors' Draft Law ceases as of 30 June 1957, and there is a possibility that a standby Committee of some type will be continued.

Thanking you, and with kind regards, I am

Sincerely yours,

GROVER C. PENBERTHY, M.D.
*Chairman, Selective Service System
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June 25, 1957

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* * *

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* * *

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THE JOURNAL

of the Michigan State Medical Society

VOLUME 56

SEPTEMBER, 1957

NUMBER 9

Contributors to This Issue



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F. H. MAYFIELD,
M.D.



S. E. MILLER, M.D.

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THE JOURNAL of the Michigan State Medical Society

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1958 MICHIGAN CLINICAL INSTITUTE



C. E. UMPHREY, M.D.

"Yesterday's Hopeless" is the theme of next year's Michigan Clinical Institute to be held in Detroit, March 19-20-21, 1958.

"Yesterday's Hopeless" points to the miracle of modern medicine: with today's medical practitioners and the use of miracle drugs, yesterday's hopeless are now returned quickly to useful, happy and healthy lives.

C. E. Umphrey, M.D., Detroit, Past President of the Michigan State Medical Society, will be General Chairman of the 1958 MCI.

The "block system" of subjects will be continued in 1958—the MCI blocks being as follows:

Surgery and Cancer: Wednesday morning, March 19

Trauma: Wednesday afternoon, March 19

Heart and Rheumatic Fever: Thursday morning, March 20

Steroids: Thursday afternoon, March 20

Obstetrics-Gynecology-Pediatrics: Friday morning, March 21

Everyday Problems of the Family Doctor: Friday afternoon, March 21

Closed circuit color television facilities again will be beamed to the Ballroom of the Sheraton-Cadillac Hotel, Detroit, during the MCI, through the co-operation of Smith, Kline and French Laboratories and the Henry Ford Hospital (1:00 to 2:30 p.m., daily). Only live patients will be demonstrated on the television program.

Every afternoon, at the close of the scientific assembly, Discussion Conferences with all speakers on the platform will be featured.

In a word, the 1958 Michigan Clinical Institute will stress clinical medicine of daily value to the medical practitioner.

MEDICARE CONTRACT EXTENDED

The Dependents of Servicemen Medical Act went into effect December 7, 1956. Michigan State Medical Society, and Michigan Medical Service as its fiscal administrator, signed a contract with the Department of Defense dated November 16, 1956. The contract originally was to run from December 7, 1956, to June 30, 1957. It was to be reviewed and revised before that date. Subsequently, due to multiplicity of agreements with various state medical societies—Blue Shield Plans—and because of lack of experience, etc., the Defense Department set up a schedule of dates for renegotiating contracts. The Michigan contract is

scheduled to be renegotiated prior to March 31, 1958. The present contract, therefore, was extended under its present form to March 31, 1958, with the approval of the MSMS Executive Committee of The Council June 30, 1957. No better arrangement was possible.

This extension does not preclude the reconsideration of the "Schedule of Allowances" if inequitable. The allowances may be increased or decreased as mutually agreed by the Department of Defense and the Michigan State Medical Society.

Emergency Care Authorized under the Dependents of Servicemen Medical Act.—Acute emergency care of any nature at a *hospital* is covered. Such emergency care for an illness or condition not otherwise covered is only authorized pending arrangements for care elsewhere. However, this does not eliminate the requirement for *admission as an inpatient to a medical facility* for 18 consecutive hours or more except for shorter periods of hospitalization for surgical procedures, treatment of fractures or other bodily injuries or in instances in which death occurs in a lesser period of time. Consequently, emergency treatment is not in itself sufficient grounds for inclusion within the Dependents' Medical Care Program.

Essentially, the Dependents' Medical Care Program is an inpatient program providing for outpatient care only in the following areas:

1. *Obstetrical and maternity services.*
2. *Bodily injuries*, limited to the treatment of fractures, dislocations, lacerations and other wounds.
3. *Diagnostic tests and procedures* prior to and/or following hospitalization for the *same bodily injury or surgical procedure* for which hospitalized.
4. *Radio therapy* prescribed during a period of hospitalization and continued or carried out on an outpatient status.

Irrespective of the existence of an emergency the above constitutes the only areas in which outpatient care can be authorized under the Medicare Program.

The foregoing emergency care, to be payable by the Government under the Medicare Program, must be either:

1. Outpatient care as stated above which is normally provided for under the Program; or
2. Care furnished to a patient who is *admitted to a hospital as an inpatient* irrespective of whether the hospital meets the definition of a "hospital" as defined in the joint directive.

(Continued on Page 1086)



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MEDICARE CONTRACT EXTENDED

(Continued from Page 1084)

This eliminates from coverage emergency care, not related to an obstetrical or injury case, that is performed in a doctor's office or clinic.

Government Liability in Obstetrical and Maternity Service under Medicare.—The scope of obstetrical and maternity services for which Medicare is liable is indicated in the definition of *Maternity and Infant Care* in the joint directive, which is: the provision of care "incident to pregnancy." Hence, outpatient "antepartum" care of pseudocyesis, or the outpatient administration of examinations and diagnostic procedure which lead to diagnosis that the patient is not pregnant, are not proper charges against the Government under Medicare legislation.

MEDICARE: \$65 is doctor's average bill.

Medicare in seven months of operation, has billed total benefits of \$566,295 in Michigan, according to a recent report by Blue Cross-Blue Shield, fiscal agents of the Program for the hospitals and the medical profession of this State.

Instituted by Congressional action to provide civilian hospital and medical-surgical care for dependents of servicemen on active duty, Medicare has helped pay the bill for more than 1,800 babies born in Michigan hospitals since the inauguration of the program (representing 55 per cent of the 3,300 hospital admissions handled under the Defense Department Program).

Runners-up to the babies were tonsil and adenoid cases with 10 per cent of admissions.

Of the total of \$566,295, about \$366,000 was billed in hospital benefits and \$200,295 for doctors' services making the average costs per hospital case about \$110.00 per case and the average physician's bill about \$65.00 per case.

HIGHLIGHTS OF THE COUNCIL

Session of July 11-12, 1957

- **Decisions of great import** to the Michigan State Medical Society and its future were made by The Council at its mid-summer session of 1957. Chief among the 117 matters favorably considered by the The Council were:
 1. A recommendation of the Finance Committee that dues for the ensuing year (1958 only) be increased \$50.00 for immediate erection of a new MSMS home.
 2. An agreement with the Michigan Mackinac Island State Park Commission, whereby the effects in the Beaumont Memorial on Mackinac Island are to be the personal property of the Michigan State Medical Society, to facilitate annual variety in exhibitions and room displays.
 3. Approval of "Statement of Principles Governing Physicians and Lawyers"—a joint

endeavor between the Michigan State Medical Society and the State Bar of Michigan (to be published in toto in JMSMS).

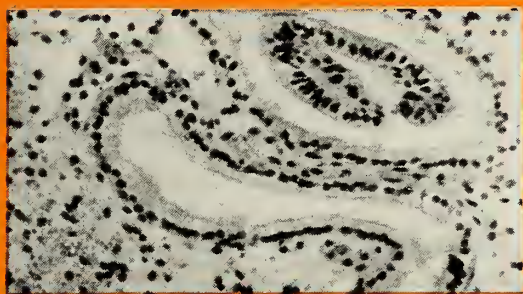
Other items of importance, decided by The Council, were:

- **Semi-annual financial reports** covering the various departments of MSMS including THE JOURNAL.
- **Progress report on the MSMS Market Opinion Survey:** The distribution of the questionnaire to the public and to the medical profession has been completed. A return of 15 per cent from the public and 35 per cent from the M.I. questionnaires is anticipated, showing high interest in this survey among both the medical profession of Michigan and the public generally.
- **Medicare contract** was extended on the same terms except that individual items in the Fee Schedule may be negotiated at MSMS request.
- **Veterans Administration Home Town Medical Care Program:** report that the contract has been extended with important revisions in the form and nature of same. Authority was given a special committee on an interim basis to negotiate with VA re revisions in individual fees.
- **Group Life Insurance for MSMS Members:** Procuring information on this type of insurance for presentation to the 1957 House of Delegates was authorized.
- **Appointments:** V. George Chabut, M.D., Northville, was appointed as MSMS representative to the AMA 6th National Conference of Physicians and Schools, Highland Park, Ill., October 3. The Chairman of the Rural Medical Service Committee and the Public Relations Council were authorized to attend the AMA Rural Health Seminar, Purdue University, October 4-5. Louis Jaffe, M.D., Detroit, was appointed to represent MSMS on the Michigan Committee on Nursing in National Defense.
- **Certain Recommendations of Chairman Arnold Walls, M.D.,** of the Healing Arts Study Committee were accepted as an interim report.
- **President-elect G. W. Slagle, M.D.,** presented his MSMS Committee appointments for the year 1957-1958.
- **L. J. Bailey, M.D.,** Detroit, was elected as Assistant Editor of THE JOURNAL.
- **Governor's Study Commission on Prepaid Hospital Care Plans:** MSMS pledged co-operation with the Commission and the University of Michigan (the latter to make this study), subject to provisions as outlined in the submitted proposed prospectus "Study Objectives and Scope" of July 4, 1957.

(Continued on Page 1090)

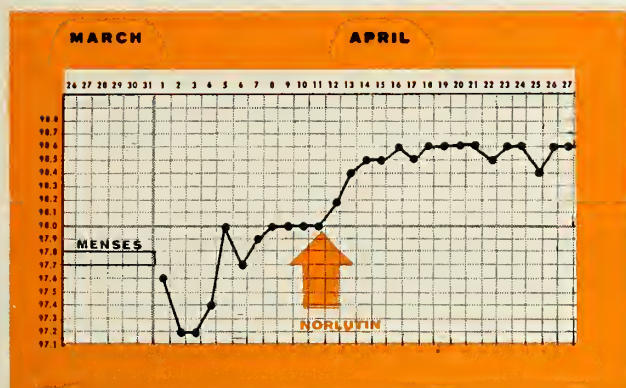
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1.



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HIGHLIGHTS OF THE COUNCIL

(Continued from Page 1086)

- **Michigan State Board of Registration in Medicine:** The names of twenty-five nominees for the five vacancies, as of September 30, 1957, were selected for submission to the Governor pursuant to the Medical Practice Act.
- **A vote of thanks** was extended to Chairman Grover C. Penberthy, M.D., Detroit, and his Medical Advisory Committee to the Selective Service System, for outstanding work in connection with this military activity throughout the years. The Council recommended that the present committees be retained on a stand-by basis on both State and County levels.
- **William A. Hyland, M.D.,** Grand Rapids, was reported as having been appointed Chairman of the important AMA Committee to Study the Heller Report.
- **The Annual Report of The Council** was presented, studied in detail, and approved for reference to the House of Delegates on September 23.
- **Councilor Conferences** were authorized to be called by each Councilor for the purpose of acquainting delegates, alternate delegates, presidents and secretaries of component societies with necessary information that may be presented to the 1957 House of Delegates.
- **Committee Reports:** The following Committee Reports were presented: County Societies, Finance, and Publication Committees of The Council, meetings of July 12; Ethics Committee meeting of June 13; Committee on Study of Uniform Fee Schedule for Governmental Agencies, June 23; Geriatrics Committee, June 25; Joint Committee with the State Bar of Michigan, June 26.
- **Annual joint meetings** of the MSMS Council with (a) Michigan Hospital Association Board representatives which presented its Resolution endorsing the MSMS Market Opinion Survey; (b) Michigan Crippled Children Commission representatives; (c) Michigan Health Council. Matters of mutual interest were discussed at these three meetings.
- **Nominations for Michigan's Foremost Family Physician:** The Council nominated to the 1957 House of Delegates the names of Daniel J. O'Brien, M.D., of Lapeer; John W. Rigterink, M.D., of Grand Rapids; and Paul Van Riper, M.D., of Champion.
- **The "Big Look" Committee** requested authorization to (a) secure a site for the new MSMS building; (b) select and employ an architect; (c) have preliminary plans prepared for display to the House of Delegates and membership at the 1957 MSMS Annual Session in Grand Rapids. This was granted.
- **Michigan Health Commissioner A. E. Heustis, M.D.,** presented progress report on poliomyelitis; designation of medical research studies; standards for atomic radiation protection; rules and regulations for nursing homes; occupational disease activity; and preliminary report on multiple screening.
- **The Publication Committee** allocated JOURNAL Numbers to specific subjects for the year 1958; also recommended as a new feature in THE JOURNAL a colored insert with last minute medical socio-economic information.
- **The County Societies Committee** recommended that The Council Chairman be authorized to appoint a committee to review the problem of medical professional liability, said committee to submit recommendations re methods of action applicable to Michigan.

AFL-CIO AND MEDICINE

The AFL-CIO Committee on Social Security has taken a firm stand against the actions of medical societies who fail to go along with union labor medical programs, according to the "Summer News Letter" issued by the Association of Labor Health Administrators. This association is a group of medical directors, labor administrators and other representatives of labor health plans.

The publication calls for action in opposing the "attack and harassment of component medical societies against union plans, particularly in the states of Pennsylvania, Illinois and Colorado." It states that at a meeting in Washington on May 15 at the "merged headquarters," the AFL-CIO Executive Committee approved funds to encourage and promote the work of the ALHA in providing "technical aid to the trade union groups in development of better health service programs for the benefit of workers and their families." The letter also stated the association "will stand ready to bring experienced technical and legal counsel on request to the defense of the victims of any efforts on the part of medical power groups to destroy the programs which endeavor to improve the quality and scope of prepaid health services available to working individuals and their families." The work will be carried out in co-operation with AFL-CIO through the department of Social Service.—*AMA Secretary's Letter.*

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Heart Beats

PREVENTION OF RHEUMATIC FEVER AND BACTERIAL ENDOCARDITIS THROUGH CONTROL OF STREPTOCOCCAL INFECTIONS

Rheumatic fever is a recurrent disease which, in most instances, can be prevented. Since both the initial and recurrent attacks of the disease are precipitated by infections with Group A streptococci, prevention of rheumatic fever and rheumatic heart disease depends upon the control of Streptococcal infections. This may be accomplished by (1) early and adequate treatment of streptococcal infections in all individuals and (2) prevention of streptococcal infections in rheumatic subjects.

Treatment of Streptococcal Infections In the General Population

Following epidemics and in certain population groups, it has been found that about 3 per cent of untreated streptococcal infections are followed by rheumatic fever. Adequate and early penicillin treatment, however, will eliminate streptococci from the throat and prevent most attacks of rheumatic fever.

Diagnosis—In some instances, streptococcal infections can be recognized by their clinical manifestations. In many patients, however, it is impossible to determine the streptococcal nature of a respiratory infection without obtaining throat cultures. The following section on diagnosis has been included in order to assist physicians in making a positive diagnosis and assuring adequate treatment.

The accurate recognition of individual streptococcal infections, their adequate treatment and the control of epidemics in the community presently offer the best means of preventing initial attacks of rheumatic fever.

Common Symptoms

Sore throat—sudden onset, pain on swallowing.

Headache—common

Fever—variable, but generally from 101° to 104° F.

Abdominal pain—common, especially in children; less common in adults.

Nausea and vomiting—common, especially in children.

This statement was prepared by the Committee on Prevention of Rheumatic Fever and Bacterial Endocarditis appointed by the Council on Rheumatic Fever and Congenital Heart Disease of the American Heart Association. The committee is cognizant of the fact that no recommendations of any group can be final at this time. The present approach may not be the eventual solution of the problem of preventing rheumatic fever. Revisions and changes will be made as new knowledge may indicate.

Common Signs

Red throat.

Exudate—usually present.

Glands—swollen, tender lymph nodes at angle of jaw.

Rash—scarlatiniform.

Acute otitis media

(frequently due to the streptococcus)

Acute sinusitis

In the absence of the common symptoms and signs, occurrence of any of the following symptoms is usually not associated with a streptococcal infection: simple coryza; hoarseness; cough.

Laboratory Findings.—**Throat culture**—hemolytic streptococci are almost invariably recovered on culture during acute streptococcal infections.

White blood count—generally over 12,000.

Treatment.—When streptococcal infection is suspected, treatment should be started immediately. Penicillin is the drug of choice. Effective blood levels should be maintained for a period of ten days to prevent rheumatic fever by eradicating the streptococci from the throat.

Penicillin may be administered by either intramuscular or oral route. Intramuscular administration is recommended as the method of choice since it ensures adequate blood levels for a sufficient length of time. Oral therapy by contrast is dependent upon the co-operation of the patient.

In the treatment of streptococcal infections in known rheumatic subjects, parenteral penicillin should be employed in at least the maximum doses recommended in the accompanying schedules.

Recommended Treatment Schedules

Intramuscular Penicillin

Benzathine Penicillin G

Children—one intramuscular injection of 600,000 to 900,000 units.

Adults—one intramuscular injection of 900,000 to 1,200,000 units,

or

Procaine Penicillin with Aluminum

Monostearate in Oil

Children—one intramuscular injection of 300,000 units every third day for three doses.

Adults—one intramuscular injection 600,000 units every third day for three doses.

Oral Antibiotics

To prevent rheumatic fever by eradicating streptococci, therapy must be continued for the entire ten days

(Continued on Page 1098)

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**CONTROLLED FORCED
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PREVENTION OF RHEUMATIC FEVER AND BACTERIAL ENDOCARDITIS

(Continued from Page 1092)

even though the temperature returns to normal and the patient is asymptomatic.

Penicillin

Children and adults—200,000 to 250,000 units three times a day for a full ten days.

Other Antibiotics.—Broad spectrum antibiotics such as erythromycin and the tetracyclines are useful in patients who are sensitive to penicillin. If given for ten days, these antibiotics are probably as effective as oral penicillin in the treatment of streptococcal infections but are subject to the same uncertainties of administration by the oral route.

The following therapy is not effective in preventing rheumatic fever when used as treatment for streptococcal infections: sulfonamide drugs; penicillin troches or lozenges.

Prevention of Streptococcal Infections In Rheumatic Individuals

Many streptococcal infections occur without producing clinical manifestations. For this reason, prevention of recurrent rheumatic fever must depend on continuous prophylaxis rather than solely on treatment of acute attacks of streptococcal disease.

Recommendations for Prophylaxis

Who should be treated?—In general, all patients who have a *well-documented history of rheumatic fever or chorea* or who show *definite evidence of rheumatic heart disease* should be given continuous prophylaxis. Although recurrent attacks of rheumatic fever occur at any age, the risk of recurrences decreases with the passage of years. Some physicians may wish to make exceptions to instituting prophylaxis in certain of their adult patients, particularly those without heart disease who have had no rheumatic attacks for many years.

How long should prophylaxis be continued?—The risk of acquiring a streptococcal infection and the possibility of rheumatic fever recurrences continue throughout life. It is, therefore, suggested that the safest general procedure is to continue prophylaxis indefinitely.

When should prophylactic treatment be initiated?—For *active rheumatic fever*, treatment should start as soon as the diagnosis of rheumatic fever is made or any time thereafter when the patient is first seen. The streptococcus should be eradicated with penicillin (See Treatment Schedules), following which the prophylactic regimen is instituted.

For *inactive rheumatic fever*, prophylaxis should be instituted when the patient is first seen.

Should prophylaxis be continued during the summer?—Yes, continuously. Streptococcal infec-

tions can occur at any season although they are more prevalent in the winter.

Prophylactic Methods—Oral and Intramuscular

Oral medication depends on patient co-operation. In most instances, failures of sulfonamide or penicillin prophylaxis occur in patients who fail to ingest the drug regularly. This can be avoided by long-acting depot penicillin given intramuscularly once a month.

Dosage—1,200,000 units Benzathine Penicillin G—intramuscularly, once a month.

Toxic reactions are the same types as with oral penicillin (see below), but occur more frequently and tend to be more severe. Some local discomfort usually is experienced.

Sulfadiazine Oral

Sulfadiazine oral has the advantage of being easy to administer, inexpensive and effective. (Other newer sulfonamides are probably as effective.) Although resistant streptococci have appeared during mass prophylaxis in the armed forces, this is rare in civilian populations.

Dosage—From 0.5 to 1.0 gm. once a day. The smaller dose is to be used in children under sixty pounds.

Toxic reactions are infrequent and usually minor. In any patient being given sulfonamides, consider all rashes and sore throats as possible toxic reactions, especially if they occur in the first eight weeks. In patients on this prophylactic regimen it is hazardous to treat toxic reactions or intercurrent infections with sulfonamides. The chief toxic reactions are:

Skin Eruptions.—For morbilliform, continue drug with caution. For urticaria or scarlatiniform rash associated with sore throat or fever, discontinue drug.

Leukopenia.—Discontinue if white blood count falls below 4,000 and polynuclear neutrophils below 35 per cent because of possible agranulocytosis, which is often associated with sore throat and a rash. Because of these reactions, weekly white blood counts are advisable for the first two months of prophylaxis. The occurrence of agranulocytosis after eight weeks of continuous prophylaxis with sulfonamides is extremely rare.

Penicillin—Oral

Penicillin has the desirable characteristics of being bactericidal for Group A streptococci and of rarely producing serious toxic reactions. A careful history of allergic reactions and previous response to penicillin should be obtained.

Dosage—200,000 to 250,000 units once or twice a day. The latter is probably more effective.

Toxic reactions are urticaria and angioneurotic edema. Reactions similar to serum sickness in-

(Continued on Page 1100)

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PREVENTION OF RHEUMATIC FEVER AND BACTERIAL ENDOCARDITIS

(Continued from Page 1098)

clude fever and joint pains and may be mistaken for rheumatic fever.

Although many individuals who have had reaction to penicillin may subsequently be able to tolerate the drug, it is safer not to use penicillin if the reaction has been severe and particularly if angioneurotic edema has occurred.

Protection of Rheumatic Fever Patients in Hospital Wards

Patients with rheumatic fever or rheumatic heart disease are often exposed to increased hazards in hospital wards as the result of contact with streptococcal carriers or patients with active streptococcal infections. Protection of the rheumatic patient is imperative because of the high rate of recurrence of rheumatic fever following streptococcal infection. In addition to the customary precautions employed to prevent cross infections, the following procedures are recommended:

All hospital patients with streptococcal infections should be fully treated by one of the methods outlined in "Recommended Treatment Schedules," in order to eliminate streptococci and avoid the carrier state.

Patients admitted with acute rheumatic fever should immediately receive a full course of antibiotic therapy, whether or not streptococci are isolated from the throat. (See "Recommended Treatment Schedules.") As soon as the therapeutic course is completed, continuous streptococcal prophylaxis should be instituted (See "Prophylactic Methods, Oral and Intramuscular")

Patients with inactive rheumatic fever or rheumatic heart disease should be placed on continuous streptococcal prophylaxis on admission to the hospital, or as soon thereafter as the diagnosis is established. (See "Prophylactic Methods—Oral and Intramuscular")

Prophylaxis Against Bacterial Endocarditis

In individuals who have rheumatic or congenital heart disease, bacteria may lodge on the heart valves or other parts of the endocardium, producing bacterial endocarditis. Transient bacteremia which may lead to bacterial endocarditis is known to occur following various surgical procedures, including dental extractions and other dental manipulations which disturb the gums, the removal of tonsils and adenoids, the delivery of pregnant women, and operations on the gastrointestinal or urinary tracts. It is good medical and dental practice to protect patients with rheumatic or congenital heart disease by prophylactic measures.

Recommended Prophylactic Methods

Penicillin is the drug of choice for administration to patients with rheumatic or congenital heart disease undergoing dental manipulations or surgical procedures in the oral cavity.

Although the exact dosage and duration of therapy are somewhat empirical, there is some evidence that for effective prophylaxis reasonably high concentrations of penicillin must be present at the time of the dental procedure. The dosage regimens employed for long-term prophylaxis of rheumatic fever are inadequate for this purpose. High levels of penicillin in the blood over a period of several days are recommended to prevent organisms from lodging in the heart valves during the period of transient bacteremia.

Not only should penicillin prophylaxis be designed to afford maximum protection, but the method must also be practical. In general, the combined oral and parenteral route of administration is preferred. All patients should be instructed to report to their physician or clinic should they develop fever within a month following the operation.

First Choice—Intramuscular and Oral Penicillin Combined.—For two days prior to surgery—200,000 to 250,000 units by mouth four times a day. On day of surgery—200,000 to 250,000 units by mouth four times a day, and 600,000 units aqueous penicillin, with 600,000 units procaine penicillin shortly before surgery. For two days thereafter—200,000 to 250,000 units by mouth four times a day.

Second Choice (if infection is not feasible) Oral Penicillin.—200,000 to 250,000 units four times a day, beginning two days prior to the surgical procedure and continued through the day of surgery or dental procedure and two days thereafter.

Contraindications.—A history of sensitivity to penicillin.

Other Antibiotics.—Erythromycin or the broad spectrum antibiotics should be employed as prophylaxis in patients who are sensitive to penicillin. In those who are undergoing surgery of the urinary or lower gastrointestinal tract, oxytetracycline should be administered in full dosage for five days, beginning treatment two days prior to the surgical procedure.

COMMITTEE ON PREVENTION OF RHEUMATIC FEVER AND BACTERIAL ENDOCARDITIS

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PR REPORT

QUESTIONNAIRES FLOOD MSMS HEADQUARTERS

Enthusiastic support assures survey vitality. Results of the Medical Insurance Opinion Study in Michigan will be based upon the views of more than 12,000 persons.

the formidable task of analyzing the mountain of statistical information will begin."

Results of the survey will not be known until presentation of the full study report is made to the MSMS House of Delegates and the public generally on September 23.



In Lansing, J. K. Altland, M.D., President of the Michigan Health Council (left) and Kenneth H. Johnson, M.D., Speaker of the MSMS House of Delegates, look over the questionnaires returned by the public and doctors of medicine during the multi-phase MSMS Medical Insurance Opinion Study in Michigan. More than 12,000 ballots were returned, processed, and tabulated. Analysis of the study results will be presented to the House of Delegates and the public in Grand Rapids on September 23. The Michigan Health Council co-operated with MSMS in conducting the Survey of Consumer Opinion on Medical Insurance Protection—a part of the over-all study.

The multi-phase study is sponsored by the Michigan State Medical Society and the Michigan Health Council. Included are separate surveys of Medical Insurance Coverage and Related Costs; Consumer Opinion on Medical Insurance Protection; a survey of Doctor Opinion on Michigan Medical Service; and a study of Related Surveys on Protection Against Medical Service Needs.

The 12,000 ballots submitted represent an unusually high return for a study of this nature and scope.

Commenting on the favorable public interest, D. Bruce Wiley, M.D., MSMS Survey Committee Chairman, said:

"The excellent public and doctor response was due principally to strong personal interest in the subject matter. However, due credit must be accorded the communications media of the state for their role in publicizing the importance of the surveys.

"Transfer of information from questionnaire to IBM punch cards will be completed by mid-August. Then

National attention will be focused on Grand Rapids during the formal presentation of the Study Report to the assembled delegates by L. Fernald Foster, M.D., MSMS Secretary.

Representatives of numerous state and national medical organizations are expected to attend the Grand Rapids meeting in order to obtain first-hand information and details of the study.

A chronic cough is the most significant symptom in the diagnosis of lung cancer.

* * *

Hematuria is a cancer warning.

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Solution of the problem of gastric cancer lies in the earlier recognition of those vague, confusing symptoms—the same symptoms described by Avenzoar 800 years ago.

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Of all the sites of malignancy in the large bowel, cancer of the rectum is the easiest to diagnose.

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... while allowing the patient
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Linoleic acid.....	6.8 Gm.
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AMA Washington Letter

THE MONTH IN WASHINGTON

If dangerous epidemics of Asian flu break out in the country this fall and winter, the medical profession will have its hands full. But the doctors won't be taken by surprise, nor will they lack specific information on proper treatment.

While the attacks in the U.S. were still sporadic and the death rate low—three fatalities in the first 11,000 reported cases—a number of major, nationwide efforts were under way to combat the disease in the months when influenza rates generally are the highest.

1. Acting in co-ordination with U.S. Public Health service, the American Medical Association was pressing forward with its campaign to insure that all physicians are informed of how to deal with the disease.

2. In line with recommendations of the AMA committee, a number of state medical societies by mid-August had laid out complete emergency plans, ready to be put in operation if needed.

3. U.S. Public Health Service epidemic intelligence experts were scanning the country for outbreaks that might be Asian influenza, and other PHS officers were investigating acute respiratory diseases. PHS also set up machinery to keep the medical and health professions informed on nationwide developments in the influenza picture.

4. Advising Surgeon General Burney was a special committee, which included representatives from AMA, American Academy of Pediatrics, American Academy of General Practitioners and the Association of State and Territorial Health Officers.

5. Manufacturers of the vaccine, by running their plants on two or three shifts and seven days a week, were hoping to have produced 60,000,000 cc. by February 1.

There was, of course, the possibility that with Congress in session through most of the summer a vast federal program would be set up, with the U.S. purchasing and allocating the vaccine. It was heartening to the medical profession that this possibility was pretty well eliminated in the early stages when the Department of Health, Education, and Welfare announced the following as official policy:

"The Public Health Service, in co-operation with the medical profession, will stimulate and promote a nationwide voluntary program of vaccination against the prevalent strain of influenza. It will not, however, request federal funds for the purchase or administration of vaccine—except for its own legal beneficiaries. The State and Territorial health officers and the American Medical

Association have jointly assured the Surgeon General that community resources, both public and private, will be mobilized to provide vaccinations for persons who are unable to pay for such protection."

This policy was reaffirmed later by the White House, when the President asked for a half a million dollars to finance the additional work for Public Health Service. The White House statement said flatly that it did not plan to have the federal government buy vaccine.

The AMA's Board of Trustees selected as members of the special committee the same physicians who make up the Civil Defense Committee, with Dr. Harold C. Lueth as chairman. In addition to the work of this committee, special articles are being published in the AMA Journal, mass circulation media are being used to bring information on Asian influenza to the lay public and the AMA Council on Drugs is investigating and reporting to physicians on the use of antibiotics in treatment of the disease.

NOTES: To wind up a long investigation of the safety of chemical additives to foods, a House committee called in a panel of scientists for two days of discussion. In general they concluded: Be careful about any mandatory federal controls.

Another hearing on weight-reducing preparations sold over-the-counter in drug stores heard a parade of witnesses, all of whom had about the same opinion: In themselves, the pills all are virtually useless in inducing loss of weight, but their other effects range from harmless to definitely dangerous.

* * *

Veterans Administration is increasing fees to physicians under the hometown care program, with the new schedules varying by states and areas. During this fiscal year VA will pay out \$8 million under this program.

* * *

A former AMA president, Dr. Elmer Hess, now heads two government advisory committees, the Health Resources Advisory Committee to Office of Defense Mobilization and the Medical Advisory Committee to Selective Service, membership of which is the same. He succeeds Dr. Howard Rusk.

Secretary Folsom is considering appointing a committee of outsiders to investigate and evaluate progress on medical research by the federal government.

lumbago

For persons who overestimate their physical capacity—as with this do-it-yourself dad—chronic fibrositis may be a postscript to a weekend of accomplishment.

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Therapy should be individualized. *Acute conditions:* 2 or 3 tablets 4 times daily. Following desired response, gradually reduce daily dosage and discontinue. *Sub-acute or chronic conditions:* Initially as above. After satisfactory control is obtained, gradually reduce the daily dosage to minimum effective maintenance level. For best results administer after meals and at bedtime.

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AMA News Notes

AMA PLANS SCHOOL HEALTH CONFERENCE

"A Decade of Progress in Fitness" will be the theme of the sixth National Conference on Physicians and Schools to be held October 30 to November 2, at the Moraine-on-the-Lake Hotel, Highland Park, Illinois. Sponsored by the AMA's Bureau of Health Education, this year's program will emphasize a continuing interest in the health and all around fitness of children and youth.

More than sixty nationally recognized consultants and resource persons have been selected from medicine, education and public health to lead the discussion groups. Topics to be considered include: the physician's role in youth fitness; community co-ordination; mental and emotional aspects of fitness; dramatizing basic fitness procedures; medical guidance in girls' recreation programs; special health problems in athletics; fitness of school personnel; optimum fitness for youth with special health problems; home and family relations; food factors in fitness.

As in previous conferences, state medical societies, state health and education departments, and national agencies concerned with school health and health education have been invited to send representatives. State societies should select their delegates and notify the Bureau as soon as possible. In addition, medical associations should encourage state health and education departments to send representatives so that a nucleus of well-informed persons from several professions can lend interprofessional leadership to school health activities within each state.

AMA JOINTLY SPONSORS MEETING ON RADIO AND TV

Representatives of medical societies, radio and television stations, voluntary health organizations, medical schools and allied groups will be invited to attend a national conference on "How to Use Local Television and Radio in the Health Field," November 7-8, at Chicago's Hotel Sheraton-Blackstone. The two-day conference is being sponsored jointly by the American Medical Association and the National Association of Radio and Television Broadcasters.

Keynote speakers at the opening session will be Dr. David B. Allman, AMA president, and Harold E. Fellows, NARTB president, discussing the importance of public interest broadcasting from the point of view of the medical profession and the radio-television industry. Panel discussions will be held on "Mutual Obligations in Public Interest Programing" and "The Matter of Taste"—the need for keeping tab on material presented over radio and television.

In addition, the group will split up into three sections by size of community to consider such things as the importance of good working relationships between health groups and radio and TV stations; financing of public interest presentations; programing of public interest presentations (content, format, live shows,

film shows, visual aids); utilization of spot announcements; working with news rooms; evaluation of program impact; promotion; medical ethics involved in public interest programing.

The program committee has announced that only a limited number can be accommodated at the conference so advance registration is advisable. Register by writing the American Medical Association, 535 North Dearborn, Chicago 10, Illinois. No fee for the conference will be charged, but luncheon tickets will be sold.

AMEF SPEARHEADS FALL CAMPAIGN

The American Medical Education Foundation will launch an intensive fall campaign for contributions to the nation's medical schools. October and November have been selected as the months in which to appeal to physicians for individual donations.

To assist local committees the AMEF has prepared a new pocket portfolio with information cards and pledge envelopes. A new folder entitled "So They May Serve" has also been produced for use in local and state mailings. A new exhibit—first displayed at the AMA convention in New York—is available from the Foundation office for state meetings. Featuring pictures of medical schools and gift checks to AMEF, this exhibit illustrates reasons why medical schools should be privately supported.

In a progress report as of July 1, the AMEF announced that the six million dollar mark of contributions from the medical profession had been passed earlier this year. The report also stated that so far in 1957 the AMEF income is 15 per cent higher than in the same period last year.

Physicians are urged to contribute generously to the Foundation during the remaining months of 1957.

AMA TO STAGE FALL RURAL HEALTH MEETING

How to develop more effective rural health programs will be the chief topic of concern at the American Medical Association's second study conference, October 4 and 5, for chairmen and members of state rural health committees. Sponsored by the Council on Rural Health, the conference again will be held at Purdue University.

The opening session will be devoted to a discussion of organizational techniques of statewide rural health committees. Another session will feature representatives of leading farm organizations outlining their health programs. Following this latter presentation will be a discussion of ways that the medical profession and agricultural groups can best work together in developing better health programs. Registrants also will have an opportunity to get together with others from their own regions to discuss mutual problems.

Reservations for this conference should be sent directly to Students Union, Purdue University, Lafayette, Indiana.

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NUMBER 9

Are Your Patients Physically Qualified to Drive?

By Harold E. DePree, M.D.
Kalamazoo, Michigan

THERE should be little need to begin this article with a recital of impressive or dramatic vital statistics relating to the "carnage on the highways," or repeat catch phrases which dramatize the appalling story of traffic death toll and injury. The efforts of the American Safety Council, lay press, and, more recently, medical literature, have presented a continuous array of facts, figures and safety slogans. So accustomed are we to these presentations that we are in danger of being lulled into a state of fatigued response. However, dulled responsiveness does not deny the fact, and perhaps a true realization of the physician's real responsibility in this situation may serve to jar us physician drivers out of any conditioned apathy. Your Michigan State Medical Society has been concerned enough to establish an active committee to study the problem and ways and means of attacking it.

In the tradition of conquest of disease, we pride ourselves on neutralizing one hazard to longevity after another in a progression from more effective treatment to ultimate prevention. But mode of living and modern man's environment brings new threats; and disease, as a cause of death, tends to give place in frequency to accidental death. We have learned continuously better ways of treating trauma, salvaging function, and rehabilitating victims of accidents. But, are we adequately turning our attention to prophylaxis in this area? Our intimate involvement forces us to face this question squarely.

A worldwide attention to the problem on the

part of law enforcement agencies, industrial and insurance agencies, safety promoting agencies, and, more recently, individual and institutional groups of physicians, has yielded rather extensive study and even more extensive literature on the subject. Automobile and highway design have come under a great deal of consideration and this is to be applauded. However, of particular interest to us is the fact that much of this study has been oriented in the direction of determining the definable specific human factors in the causation of automobile accidents. Much has been elucidated and, in the words of the familiar phrase, much yet needs to be learned. There is the hope in the work of these agencies that a practicable and relatively simple driver screening procedure may evolve. Yet, again and again, these studies show that the complexity of the human causative factors in accidents, which are often of a temporary situational nature, makes the selection of safe drivers by simple means extremely difficult. Most significantly, those factors shown to be of definite importance are of a nature which could only be known and properly assessed by someone trained and having an intimate knowledge of the physical and emotional status of a prospective driver. This "someone" must logically be the driver's physician.

The discharge of our responsibility may follow at least two main paths. One involves education of our patients in the hazards which certain physical factors impose on driving, and, the other, prohibition of driving by patients we know to be bad risks on the highway. Too often the physician

TABLE I. ORGANIC FACTORS IN ACCIDENT CAUSATION†

Disorder	Recommend re: driving
Neurologic	
Epilepsy	Opinion divided from complete prohibition to qualified (5 years free of seizure, adequate aura, et cetera).
Neurologic disease involving loss of function of extremity or loss of coordinated movement.	Opinion divided but consensus states prohibition unless both arms and one leg normal. (Also individual consideration by physician.)
Neurologic disease involving disturbances of alertness in consciousness.	Individual consideration by physician.
Visual	
Visual standards	Minimal standards— Public transport drivers: 20/30 each eye (correctible to) Form fields of 70° in horizontal each eye and 140° both eyes. Yearly exams. Private car drivers: Correctible to 20/40 in the better eye. Form fields of 70° in horizontal. Meridian each eye or 140° in horizontal meridian in one eye. No requirements for color or depth.
Auditory	
Minimal	Spoken voice test. 50% of words at 5 ft. in better ear.
Cardiovascular	
Severe diminished cardiac reserve	Prohibited for private car, commercial or transport drivers.
Aortic Stenosis	
Adams-Stokes Syndrome	
Hypertension with Complications	
Complete A-V Block	
Cerebro-Vascular Disease	
Uncontrolled paroxysmal auricular fibrillation, flutter or tachycardia.	
Carotid Sinus Syndrome with vertigo or syncope.	
Aneurysm of any centrally located vessel.	
Congenital Heart Disease	To be evaluated by individual consideration.
Organic Valvular Disease	
Coronary Artery Disease	
Orthopedic	
Head and Neck	Prohibited
Conditions which thru pain or associated neuromuscular deficit cause loss in rotation to either side of more than 75%	
Thoracic	
Severe kypbosis, scoliosis, lordosis	Private car only (individual consideration)
Upper and Lower extremities (minimal standards)	Normal upper and lower extremities for commercial transport. Two good upper or one good upper and one good lower for passenger car.
Drug and Chemical	
Alcoholism	Obviously prohibited
Anti-bistamine	
Anti-soporified	Individual consideration and warning by physician.
Sedatives	
Diabetes Mellitus	Individual consideration.

†Modified from "Medical Aspects of Motor Vehicle Accidents," *New York State Journal of Medicine*, Vol. 56: No. 24, December 15, 1956.

shares in his patient's sense of having his rightful prerogative of driving threatened. He may thus become involved, thru a misguided sense of loyalty to his patient's welfare, in an effort to preserve that prerogative, clouding good judgment of the

real public hazards involved. What then are proven factors which we can recognize in our patients as signs increasing accident likelihood? This question has probably been applied most extensively to the area of industrial transport drivers. The most notable investigation and practical application is found in the experience of the New York Package Service. The physicians who checked drivers for this service found they could cut down their accident rate by paying attention to physical conditions falling under certain systemic categories. A recent symposium held in New York to study just this problem outlined important organic factors in accident causation and classified them, generally, by these same categories. With some slight modification for the purpose of simplicity, these factors would then appear as shown in Table I.

Table I is here presented as an attempt to place in tabular form the recently expressed opinion of experts in the field of accident prevention. It is undoubtedly not complete, and is not intended to serve as an authoritative reference which should guide in the selection of safe drivers nor prescribe the action of the physician in handling the problem of the unsafe driver. These physical conditions are felt to be reasonably important considerations when they involve someone guiding a potentially destructive vehicle through a traffic pattern at what are considered reasonable speeds. This presentation, it is hoped, will serve to emphasize to us as physicians, that patients with these disease states, may also occupy the driver's seats of automobiles, trucks or buses traveling our highways. A glance at the table will serve immediately to point up the divergence of opinions, the frequent importance of "individual consideration" for each case, and, consequently, again the importance of the physician in the whole accident prevention effort.

Thus, although many with experience and authority have frequently expressed the opinion that there are now inadequate factual data to determine accurately which specific organic factors in accident causation are important, there is general agreement that these factors do exist. Table I shows some of the importantly considered ones. If some selection of drivers for safety is to be accomplished at all, and it cannot be done by simple screening methods, it must follow that an

(Continued on Page 1164)

Use of Chemical Tests for Intoxication in Michigan Law Enforcement

By C. W. Muehlberger, Ph. D.
Lansing, Michigan

ALTHOUGH the state of Michigan has a worldwide reputation as the home of the automobile, it lags definitely in highway safety. Last year over 1700 citizens lost their lives on Michigan's highways. Only ten states (mostly in the mountainous West) have higher death rates from highway accidents.¹ But this does not tell the most tragic part of the story: the greatest single cause of death in school-age children of Michigan (ages five to nineteen years) is motor vehicle accidents.²

To what extent does alcoholic liquor play a part in producing this ghastly toll on our highways? Where careful systematic studies have been made, it has been shown that there is a remarkable degree of correlation between alcohol in the blood and death on the highway. Investigation of 246 consecutive violent deaths in Westchester County, New York³ showed that 46 per cent of all deaths from automobile accidents involved the drinking of alcoholic liquor. More recent studies by the Delaware State Police⁴ have shown that during 1956, 59 per cent of all fatal highway accidents involved a driver or an adult pedestrian who had been drinking. Similar values were obtained in Maryland in a survey conducted by the office of the State Medical Examiner.⁵

Over a long weekend—such as Memorial Day, 1957 (four days)—we can safely estimate that twenty citizens will lose their lives on Michigan highways and nine of these will involve a driver or a pedestrian who has been indulging in alcoholic liquor.

Now there is no statute making it unlawful to drink and drive. One only is forbidden to operate a motor vehicle on the public highway while “under the influence” of intoxicating liquor,* and by Supreme Court interpretation† such a condition occurs as soon as the alcohol

“impairs the faculties of perception and judgment.” This point is reached long before a person becomes “drunk” in the lay interpretation of the term. The Supreme Court of Arizona has defined the term somewhat more explicitly:

The expression “under the influence of intoxicating liquor” covers not only all the well-known and easily recognized conditions and degrees of intoxication, but any abnormal mental or physical condition which is the result of indulging in any degree of intoxicating liquors, and which tends to deprive him of that clearness of intellect and control of himself which he would otherwise possess. If the ability of the driver of an automobile has been lessened in the slightest degree by the use of intoxicating liquors, then the driver is deemed to be under the influence of intoxicating liquor. The mere fact that a driver has taken a drink does not place him under the ban of the statute unless such drink has some influence upon him, lessening in some degree his ability to handle said automobile.**

As in any other type of criminal offense, it is incumbent upon any law enforcement agency to establish the guilt of a person charged with “driving while under the influence of intoxicants” beyond a reasonable doubt. In fact, one practically requires that the law enforcement officers make a medical diagnosis in order to establish the validity of their complaint. Merely to observe an erratic or reckless driving pattern, smell the odor of alcoholic liquor on the breath of the driver and to note evidences of impaired muscular coordination as indicated by uncertainty of step, faulty balance, slurred or blocked speech are not always sufficient to provide convincing proof “beyond a reasonable doubt.” Interrogation as to illness or injury, disability, taking of medicines prescribed by a physician, fatigue, etc. may assist in establishing the validity of the officer's complaint, but there may still be left a doubt, which some might consider to be a reasonable one.

For years, it has been recognized that, within limits of human variability, the concentration of alcohol which is circulating in a person's blood

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*Compiled Laws of Michigan, 1949, Section 256.303.

†People v. Townsend, 214 Mich. 267 (1921).

**Steffani v. State, 42 Pac. (2nd) 615 Arizona 1935.

stream and which is furnishing alcohol to the brain and other nerve centers, is a determining factor in measuring the extent of intoxication. Some years ago the American Medical Association appointed a special Committee to Study Problems of Motor Vehicle Accidents. After considerable study and investigation, this Committee advocated the use of chemical tests for intoxication and stated:

"The committee, of course, reiterates its previous statement that the percentage of alcohol in the blood is a reliable index of the degree of intoxication, especially when considered along with external symptoms of intoxication. There is listed in brief form the chemical standards for the legal interpretation of "under the influence of alcohol" in terms of the percentage of alcohol in the blood or its equivalent in other body materials:

1. Below 0.05 per cent alcohol in the blood: no influence by alcohol within the meaning of the law;
2. Between 0.05 and 0.15 per cent, a liberal, wide zone: alcoholic influence usually is present, but courts of law are advised to consider the behavior of the individual and circumstances leading to the arrest in making their decision;
3. 0.15 per cent: definite evidence of "under the influence," since every individual with this concentration would have lost to a measurable extent some of that clearness of intellect and control of himself that he would normally possess.

These standards have proved themselves to be fair and practical. The zone below 0.05 per cent vindicates the nondrinking or temperate driver, the wide middle zone considers tolerance and idiosyncrasy, and the highest zone indicates alcoholic influence regardless of unusual tolerance. The chemical tests can be performed with remarkable accuracy and are the best means of proving alcoholic influence. It is necessary, however, that care be used in making the tests and that those who run the analyses have sufficient experience and are able to show that they can perform the test accurately.⁶

Thus biochemical analysis to determine the amount of alcohol circulating in the blood stream of an individual has come to serve as a very important objective guide to the law enforcement officer in making certain that the behavior and impairment which he observes is actually due to alcohol and not to some other cause.

Since 1937, court cases involving chemical tests for intoxication (analyses of blood, urine or breath) have been accepted in the courts of at least thirty states, and in over 200 instances⁷ conviction has been appealed to higher (appellate) courts. To summarize these 200 cases reviewed by the higher courts, I may say that in no instance

has a conviction of driving while under the influence of intoxicants been reversed when the following elements have been established:

1. The subject was in the custody of one who was empowered to make an arrest or who did formally make an arrest.
2. The subject submitted to the test without compulsion of any kind.
3. The test performed was one which was generally recognized as reliable.
4. The material analyzed was properly identified as that obtained from the subject.
5. The test was made by a skilled and qualified person employing chemicals and techniques which he knew of his own knowledge to be accurate.
6. There was expert testimony to interpret the significance of the results of chemical analysis in terms of "alcohol influence."

Our own State Supreme Court has ruled on only one case involving chemical tests for intoxication.[†] In this case, a breath test employing the Harger Drunkometer was administered to the defendant. In reversing the conviction, our Supreme Court stated: "There is *no testimony in the record* that there is general acceptance by the medical profession or general scientific recognition of the results of a Harger Drunkometer test as accurately establishing the alcoholic content of a subject's blood and *thus the extent of his intoxication*" (italics added). Since that time (1949) at least twenty-three convictions in ten states have been uniformly upheld when it was shown that the Drunkometer breath test was properly made by a qualified person and that expert testimony was provided concerning the test's reliability.

Ever since 1941 the results of chemical analyses of blood specimens obtained from subjects who submitted voluntarily have been admitted as evidence in trials in Michigan involving driving while under the influence of intoxicants, negligent homicide or manslaughter. During the last ten years the laboratory of the Michigan Department of Health has made 6,800 such analyses of blood for law enforcement agencies. There is no question concerning admissibility of such evidence. The argument that employing a person's blood to secure evidence which might be used against him is violative of the Fifth Amendment that "no person charged with a crime should be compelled

[†]People v. Morse, 325 Michigan 270 (1949).

to be a witness against himself" has been shown to be false.*

Blood tests present certain practical difficulties. Some persons balk at the idea of having a needle thrust into their vein. Arrests for so-called "drunk driving" frequently occur late at night and in sparsely settled areas. The problem of securing the services of a willing physician, nurse or medical technologist who is skilled in taking blood specimens is not simple. Furthermore, the taking of a specimen may result in the requirement that such a person might be served with a court summons to testify at a subsequent trial. After several such experiences, only the most public-spirited physician can be prevailed upon to take blood specimens in cases involving suspected intoxication.

To obviate the difficulties attendant upon engaging medical personnel, indirect methods for estimating the blood alcohol concentration have been resorted to. These involve the measurement of the alcohol content of urine or breath.** They are based upon the physiologic fact that the concentrations of alcohol in the urine and in the alveolar breath are proportional to the concentration of alcohol in the blood which is being supplied to the kidneys and lungs. Such tests are only slightly less reliable than blood as an index of alcohol intoxication and, for purposes of confirming (or denying) an opinion based upon objective indications of intoxication, they are amply accurate. One must remember that in a factor such as alcohol influence which, in humans, varies from .05 per cent to .15 per cent alcohol content of blood, variations of .01 per cent or .02 per cent are not of material clinical significance. Breath tests certainly help differentiate between the driver who actually had the proverbial "two beers" and the one who had two too many.

*See U. S. Supreme Court ruling in upholding the conviction in *Breithaupt v. Abram* (352 U.S. 432 (1957)), abstracted in *J.A.M.A.* 164:406 (May 25) 1957. This position is also held by our own State Supreme Court. See *People v. Placido*, 310 Mich. 404 (at page 409) (1945).

**To reliably indicate the blood alcohol concentration, breath specimens should not be taken until at least fifteen minutes after the last drink. This insures that any alcohol in the breath comes from the subject's lungs, and not from residual liquor which might remain in the mouth and throat from the last drink. For recognition of the reliability of breath tests, see editorial "Chemical Tests and the Drunken Automobile Driver," *J.A.M.A.*, 154:1279 (April 10) 1954.

In a number of Michigan's cities, various breath or urine testing procedures are being employed by law enforcement agencies. Detroit police use the Drunkometer breath test⁸ as a

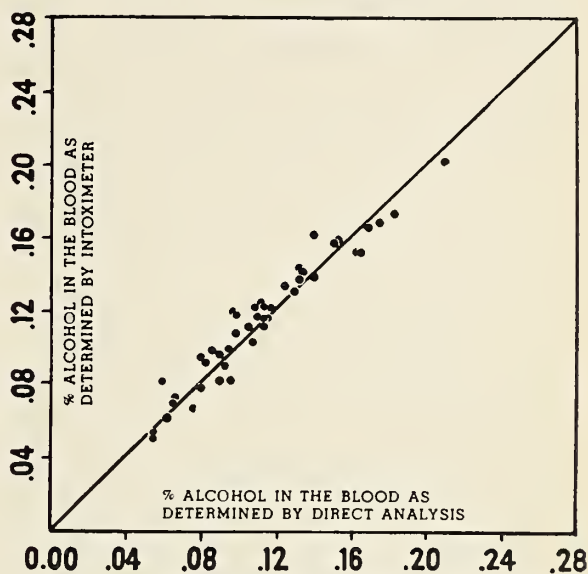


Fig. 1. Correlation of blood alcohol levels obtained by direct blood analysis and by breath analysis with the Intoximeter.

Fig. 1. Correlation of blood alcohol levels obtained by direct blood analysis and by breath analysis with the Intoximeter. From: "Evaluating Chemical Tests for Intoxication," National Safety Council, Chicago, 1953 (reprinted by permission).

screening procedure to weed out the temperate drinkers from the more indulgent variety. Kalamazoo also uses the Drunkometer for screening purposes and in persons who show .15 per cent blood alcohol values, a urine specimen is obtained and used for court testimony. Grand Rapids uses a new breath testing device known as the "Breathalyzer" for screening purposes. When a driver flunks the Breathalyzer test (indicates a blood alcohol value of .15 per cent or more) he is asked to submit to a blood test and this is employed in the court hearing. Many other cities—Saginaw, Battle Creek, Benton Harbor, Midland, Lincoln Park, Niles, Owosso, Grosse Pointe Shores, Holland, River Rouge, and Birmingham—use a portable breath testing device known as the Intoximeter.⁹⁻¹⁰ In this test, the law enforcement officer merely obtains the breath specimen which is permitted to pass through the absorption tubes of the test unit. The unit is then sealed, returned to the laboratory and analyzed by a skilled chemist. Simultaneous tests of both blood and breath conducted at Michigan State University have shown Intoximeter values to be remarkably ac-

curate in establishing the blood alcohol level. (Fig. 1.)

In court cases, the Intoximeter breath test has been widely used in southwestern states (California, Texas and Oklahoma). Of twenty convictions which were appealed to higher courts, only one was reversed, and that because of failure to properly identify the particular Intoximeter unit employed in the test. Nearly 5,000 Intoximeter units have been processed by the Crime Detection Laboratory of the Michigan Department of Health for law enforcement agencies during the past ten years.

As with all new procedures, one will always find a few skeptical and dissenting voices, even among medical scientists. Early objections to the Harger breath test ("Drunkometer") which were the cause for reversal in the Morse case stemmed from erroneous values of the blood: breath distribution ratio of alcohol published by Yale University scientists. These have been retracted¹¹ and it is now generally agreed that 2,000 volumes of alveolar breath will contain the same quantity of alcohol as will one volume of blood.

While many attorneys object to the use of breath tests in establishing the degree of alcohol influence, only one source of criticism arises from the field of medical science in our state. A Saginaw pathologist¹² has been employed consistently by a prominent defense attorney to attack the validity of breath tests in general and the Intoximeter procedure in particular. In court, such criticism loses much of its weight when it is established in cross examination that this particular pathologist has never made a single test with the Intoximeter and has reached his adverse conclusions only by his reading of some of the literature in scientific journals.

The use of modern methods of crime detection has become almost imperative if we are to preserve our basic government, which is founded upon "liberty under law," and chemical tests for intoxication do serve to reduce the guesswork in eliminating those who attempt to drive on our highways while impaired by liquor. These tests not only help to convict the driver who is under the influence of intoxicants, but, what is more important, they serve to exonerate the driver who really has only taken two beers, who is unfortunate enough to have been involved in an accident and whose breath smells of alcoholic liquor.

In upholding a sentence of involuntary manslaughter where a blood specimen was taken from a defendant while semiconscious and which specimen, on subsequent analysis was found to have .17 per cent alcohol, the U. S. Supreme Court said (*Breithaupt v. Abram*):

The test upheld here is not attacked on the ground of any basic deficiency or of injudicious application, but admittedly is a scientifically accurate method of detecting alcoholic content in the blood, thus furnishing an exact measure upon which to base a decision as to intoxication. Modern community living requires modern scientific methods of crime detection lest the public go unprotected. The increasing slaughter on our highways, most of which should be avoidable, now reaches the astounding figures only heard of on the battlefield. The States, through safety measures, modern scientific methods, and strict enforcement of traffic laws, are using all reasonable means to make automobile driving less dangerous.

As against the right of an individual that his person be held inviolable, even against so slight an intrusion as is involved in applying a blood test of the kind to which millions of Americans submit as a matter of course nearly every day, must be set the interests of society in the scientific determination of intoxication, one of the great causes of the mortal hazards of the road. And the more so since the test likewise may establish innocence, thus affording protection against the treachery of judgment based on one or more of the senses.

In a recent action,¹³ the American Medical Association's Committee on Medical Aspects of Automobile Injuries and Deaths pointed out the seriousness of the menace of drinking drivers and has recommended that the blood alcohol ceiling be lowered from 0.15 per cent to .05 per cent. Until such time as our legislators can be convinced that .15 per cent is too high, it seems questionable if this stricter limit could be enforced. Perhaps in the interest of saving 1,700 lives per year in Michigan, we might be justified in taking more drastic measures than are now being employed.

With the current trends toward the use of pseudo-science in advertising all types of commodities, tooth pastes, beer, cigarets and arthritis remedies, one is likely to look upon all scientific solutions of our problems with a jaundiced eye. Lawyers and judges are very properly skeptical and conservative with respect to the uses of science in the court room. In the interest of removing the hazardous driver from our highways

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Drugs and Driving

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MOTOR vehicle accidents present acute medical problems. Our present way of life is impossible without motor vehicles in great numbers. Not only are large amounts of goods from raw materials to finished products transported by motor vehicles, but daily most individuals travel by some form of motor vehicle transportation to school, work, social activities, or to purchase necessities.

Although much remains to be accomplished, progress has been made in improved highway construction. Motor vehicles, in addition to becoming more numerous, have become more powerful and more maneuverable. With expert or inept operation, they dart in and through congested traffic areas with great ease. Rapid acceleration, deceleration, sharp turning, and great ease of maneuverability require increasing skill, judgment and quick decision upon the part of drivers if accidents are to be avoided. Increased driver training and public education have helped some toward improving the quality of driving upon our highways; however, there has been no structural or functional improvements in the sensory and reaction time mechanisms of man. In fact, with split-second reaction time required for safe motor vehicle driving, there is just cause for concern over the factor of "human performance" in relation to motor vehicle accidents. In this area of "human performance," physicians have a solid responsibility and a real contribution to make toward accident prevention.

The influence of drugs upon motor vehicle driving abilities is a significant factor in the "human performance" element of motor vehicle accidents. Physicians above all others best are able properly to advise in this area. Numerous common drugs produce in some individuals various reactions impairing their ability to drive a motor vehicle. The degree of impairment varies tremendously depending upon the severity and type of reaction. Physicians administering drugs known or likely to produce reactions impairing sensory,

mental or physical functions have a clear obligation fully to inform their patients concerning this matter.

In addition, some patients experience unusual reactions to drugs that ordinarily do not impair driving ability in most individuals. Physicians ever must be alert to this possibility and be on the look-out for unusual reactions, allergic or otherwise that impair sensory, mental or physical functions making it unsafe to drive. Such patients also must be firmly advised not to drive a motor vehicle until the hampering symptoms have been eliminated. The time required for recovery is astonishingly long for many drugs. Some allegedly "short acting" hypnotics may cause impairment as long as twenty-four hours from a single dose.

Several groups of drugs rather universally impair driving ability in one manner or another. The more important of these drugs are discussed.

Central Nervous System Depressants

Analgesics (narcotics).—The drowsiness induced by analgesic drugs sufficiently damages sensory functions and reaction time that patients so afflicted should not drive a motor vehicle. In addition, morphine, its derivatives and the synthetic narcotics such as Demerol, cause varying amounts of euphoria, inability to concentrate, apathy, dimness of vision and rapid flow of uncontrolled thought. Patients under the influence of these drugs should not drive a motor vehicle. Individuals habituated to the use of narcotics should not drive a commercial or passenger transport vehicle. Ordinarily, these individuals are not drowsy or euphoric, so unless experiencing withdrawal symptoms may drive a private motor vehicle.

Hypnotics and Sedatives.—These drugs not only depress central nervous system activity, producing drowsiness and sleep, but also they may produce motor and sensory changes. No doubt small doses of some of these drugs quieting a highly excited and "jittery" patient actually temporarily may improve his driving ability. However, this

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is not the usual circumstance, therefore it is best to advise patients taking hypnotic doses of these drugs not to drive a motor vehicle. Of course, a barbiturate addict is incapable of driving a motor vehicle. Patients receiving regular mild sedation who experience no drowsiness may drive a motor vehicle. Patients receiving barbiturates and local anesthetics for minor surgery should not be permitted to drive a motor vehicle until fully recovered from the effects of such drugs.

Tranquilizing Drugs (meprobamate, chlorpromazine, reserpine, et cetera).—During the initial period of administration, some drowsiness frequently is experienced. Also, from large doses, the accompanying hypotension may occasionally produce short episodes of faintness or giddiness. Therefore, during the initial phase of dosage adjustment, patients should not drive a motor vehicle. At all times, these patients should be carefully observed for symptoms of drowsiness or faintness. Patients stabilized on a maintenance dosage of these drugs, who are without symptoms of drowsiness or episodes of faintness, may drive a private motor vehicle but not a commercial or passenger transport vehicle.

Central Nervous System Stimulants

Benzedrine, et cetera.—Although these drugs temporarily increase alertness and efficiency, large doses in some individuals may produce headache, agitation, irritability and a decreased ability to concentrate. In all individuals, a period of fatigue and depression follows the initial stimulation. An individual may take one of these drugs to prolong the period of alert driving for a period of two hours but not longer. After this two-hour period, the patient should cease driving. The dosage should not be more than 5 or 10 mgs. and should not be repeated that day.

Antihistamines and Drugs Preventing Motion Sickness

There is great individual difference in reaction to these drugs with dizziness and/or drowsiness occurring fairly frequently. Moreover, it is unpredictable in which individuals or with which preparations dizziness and/or drowsiness will occur. Patients under these medications should not drive a motor vehicle until it has been established by prior trial that they do not experience

dizziness or drowsiness to the specific preparation administered.

Anti-infective Agents

Streptomycin.—In full dosage, undesirable reactions of nausea, loss of sense of balance with dizziness, ringing in the ears, and deafness may occur. A patient developing such symptoms should not drive a motor vehicle. Patients receiving over 1 gm. of streptomycin daily should be watched carefully for the development of any of these adverse symptoms.

Sulfa Drugs.—Patients receiving these drugs should be warned that if they develop any drowsiness or dizziness, they at once should cease driving a motor vehicle.

Hallucinogens

Marijuana, et cetera.—These drugs have singular abilities for changing normal emotional reactions even causing individuals to become oblivious or indifferent to their surroundings. Individuals under the influence of these drugs should not drive a motor vehicle.

This brief review of the common types of drugs impairing the ability of an individual to drive a motor vehicle would not be complete without another admonition. Frequently, individuals under the influence of a drug may realize his driving ability is impaired so he attempts to compensate by driving slowly and unduly cautiously. This unusual behaviour frequently constitutes a significant traffic danger. Therefore, physicians should not attempt lightly to discharge their clear responsibilities in this area by the mild admonition to drive slowly or drive carefully. We must face the situation squarely and firmly advise these patients under no circumstances to drive while under the influence of drugs likely to impair their sensory, mental or physical ability to drive a motor vehicle safely.

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The Highway Accident Problem in Michigan and What Has Been Done About It

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LAST year, in Michigan, motor vehicles traveled more than 28 billion miles. Undoubtedly, there was opportunity for millions of collisions which did not occur. In spite of hazardous weather, roadway and light conditions—oftentimes in spite of poor intersection and open roadway design and maintenance—thousands of potential conflicts were avoided for every collision that occurred.

Perhaps we should conclude that Michigan motorists are doing well, that we are beating the laws of chance when only 300,000* or so collisions result. But long ago we learned that accidents are avoidable. We have learned that accidents are not necessary in spite of the great exposure traffic can generate. Records of some drivers prove it is possible to travel the highways under adverse conditions for years and still avoid being involved in an accident.

Study of each accident reveals that it would not have happened if a pedestrian or one or more drivers had not failed to do the right thing. The error most often involved is a violation of law. Such repeated human failure brings about tragic losses. In Michigan, during 1956, alone this meant 1,747 killed. This was a reduction from the horrible toll in 1955 of 2,016 killed. Annually, more than 60,000 are injured in Michigan traffic accidents. The economic loss is conservatively estimated to be in excess of \$200 million a year.

This unnecessary traffic toll is all the more tragic when we realize that many of those killed, those injured, and those sustaining economic loss were entirely free of blame. They were victims of another's negligence.

Statistics do not show the sad effect upon the families of those who were killed or seriously injured. The traffic accident toll includes heartaches and shattered family plans for the future. Frequently, children are bereft of father or mother

love and guidance. Often, poverty results when the family breadwinner is the victim.

Each of the drivers involved in this awful toll did not expect to be in a traffic accident and did not want to have one. Each was confident of his driving ability and judgment. Yet each of Michigan's 300,000 crashes in 1956 was due in part to either a pedestrian or driver (and in some cases more than one driver) doing something definitely unsafe and, in most cases, illegal.

Each became involved because of one or more human weaknesses; inattention, impatience, weariness or drugged senses, ignorance of the chances of a collision, unawareness of the existence of a hazard, and expectation that others will save the situation for them by taking evasive action.

A false sense of security is developed in most drivers who have not yet had a traffic accident even though they repeatedly indulge in illegal driving actions. They have "gotten away with" bad driving long enough to become convinced that it is not unsafe driving. Unfortunately, this false sense of security isn't always destroyed when an accident does happen to the driver. Too often he rationalizes the crash as the other fellow's fault.

In fairness to drivers and pedestrians, it must be admitted that the traffic stream in which they must move contains many hazards which imperil their safety. Michigan has more than 100,000 miles of streets, and state and county highways. Many miles of these have built-in hazards because they were designed for traffic of a bygone day. Even our improved highways, with but a few exceptional miles, have countless intersections at grade at each one of which conflicting traffic can collide. Every private driveway or access to roadside business adds to the potential danger of collisions. Pedestrians crossing streets and highways also add to the exposure to conflict. To these millions of friction points in our road network must be added the oftentimes inadequate maintenance of road surface and shoulders. And then still another handicap is frequently added when rain and snow make the surface more difficult to traverse with-

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*Slightly less than 200,000 traffic accidents were reported but it is conservatively estimated another 100,000 occurred which were not reported.

out loss of vehicular control. On almost all of this street and highway network, opposing streams of fast moving traffic are separated by a foot or so of "no man's land," sometimes marked by a center line.

This is the facility upon which 3,500,000 Michigan drivers operate the 3,000,000 vehicles registered in this state. Thousands of these vehicles are in such defective condition that their drivers and other motorists are jeopardized.

Engineering can make many present high accident locations safer. Limited access and divided highways can lessen the chances of collision. Elimination of obstructions to view at intersections, more street lighting, better maintenance, and improved traffic control devices can help make streets and highways safer. Better city and suburban planning in conjunction with street and highway development can prevent conflicts in the movement of traffic.

But engineering improvements are far from the total answer. Collisions still occur on the most improved highways and at intersections where the best present day engineering "know how" has been applied.

In addition to engineering improvements, it remains for all concerned to counteract the pedestrian and driver weaknesses mentioned earlier. This involves two major undertakings: education and discipline. When drivers and pedestrians will not exercise self-discipline, the deterrent effect of enforcement and driver license control must then be used.

These conclusions are not new. Enforcement, education, and driver license control have long been acknowledged as necessary methods of stopping the careless acts of pedestrians and drivers. This is true whether the human failure is caused by ignorance or willfulness.

Everyone will agree that present enforcement, education, and driver license control activities are somewhat effective. Without them the accident toll would be much worse. But how many will agree that present enforcement, education, and driver license control methods are *not* achieving anywhere near the maximum effect possible? If presently known methods were utilized fully, administered efficiently and with vigor, and if public acceptance and support were fully developed, we would see a one hundred per cent improvement in driver and pedestrian behavior. Their increased knowledge, skill, understanding, and acceptance of

regulations and discipline would be reflected in a sharp decrease in accidents.

Responsibility for improvement in driver and pedestrian knowledge, understanding and in their acceptance of discipline, belongs to officials, politicians, educators, and lay group leaders. Yet many of these responsible people evidence far too much apathy or interest in other ends than accident prevention. They are irresolute and pliant. They lack knowledge and fail to accept leadership responsibility.

It is not enough to just decry the stupidity and carelessness of the driver and pedestrian. They need help, guidance and control which must come from public information media, and from governmental, educational and lay group leaders and administrators.

Increase in application of known methods, acceptance of responsibility and improvement in administration and leadership, however, will still not be the complete answer. Better ways of educating and influencing drivers and pedestrians must be found. More research and experimentation must be undertaken to improve present methods. Some of the ablest traffic administrators and educators are very concerned about the small impact their best efforts produce.

Many enforcement leaders, for example, are quite aware that, though the fatal accident rate in their jurisdiction has been decreased, the total accident rate has kept pace with the increase in travel. Enforcement has not successfully diminished illegal driving and walking acts if the total accident record is a fair index. These conscientious people are asking how enforcement can be improved so that it will achieve its objective of obtaining greater driver and pedestrian compliance with safety laws.

Driver education people want to know how to improve driver education methods. It is true that the accident rate of teen-agers who have taken a driver education course is decidedly lower than that of those who have not. Still many who have taken such a course do have accidents subsequently. Driver educators believe better results can be obtained when research develops better methods of driver education.

Driver license administrators say they do not know what to do for many problem drivers, those who have accidents frequently or receive many traffic tickets. Administrators report that suspension and revocation of license is not the answer

in a majority of the cases. How to get at the underlying causes of bad driving and how to rehabilitate problem drivers is a major problem today in preventing accidents.

So far, I have been discussing accidents, one of the important manifestations of our traffic problem. But equally obvious manifestations of our inability to properly administer street and highway traffic are congestion and insufficient parking facilities. These shortcomings cannot be blamed upon the driver and pedestrian. But, as with most accidents, the basic causes of traffic congestion and inadequate parking are human failures. Economics also play a part, admittedly. Off-street parking facilities and street and highway construction cost a great deal.

Much congestion can be decreased, however, if more efficient use is made of existing streets and highways. Many effective means can be used to improve vehicle traffic movement, such as: one-way streets; elimination of curb parking, at least at rush hours; elimination of turns; establishment of by-passes and thru streets; lane markings; special routes for truck traffic; proper timing and synchronization of signal systems.

Why are these methods and devices not used more extensively? In many cases those officials who should propose the improvements do not do so because they are unaware of what could be done. They have no training in traffic flow planning and operations, nor is a trained traffic engineer employed in their city or county. In other places proposed changes designed to better traffic movement are opposed and effectively stymied, sometimes by a single individual, more often by a group. This opposition is often due as much to shortsighted, selfish motives as to ignorance of the benefits to be derived from the change.

Correction of all these causes of unsafe and inefficient traffic movement is a huge task of public administration on the one hand and human relations on the other. Basically the problem is one of education, politics and economics.

Before much improvement can be expected, drivers and pedestrians must be educated in what is safe and unsafe behavior. Since education of all is undoubtedly impossible, at least to the degree necessary, some form of regulation and control must be exercised. This requires the consent of the governed, the enlightened understanding of the majority of voters, the resolute action of legislators, the activity of regulatory agencies, et cetera. Edu-

cation, regulation, road building, and other pertinent matters cost money and involve public policy—introducing the elements of economics, politics, public and official understanding. These in turn require public information and education, as well as training of official agencies' personnel.

To say that traffic improvement is largely a matter of human relations, finance and effective public administration is not enough. To prevent traffic accidents:

1. We need to train more career people for traffic administration. Safety is a by-product of good street and highway administration.

2. We need to improve the traffic knowledge of many existing officials and traffic workers. This includes mayors, city managers, county supervisors, police, sheriffs, school teachers and many others.

3. We need to improve the individual driver's and pedestrian's understanding of traffic hazards. They must know how to recognize hazards in time and how to keep out of trouble.

4. We need to develop greater respect for laws and regulations, to engender more self-discipline in our people, especially when they are driving.

5. We need to build public support for firm, impartial enforcement and driver license administration. The public must desire more stringent enforcement methods rather than oppose the apprehension and conviction of violators.

6. We need to encourage more selfless, co-operative group action to get the teamwork necessary, especially at the local levels of government.

7. We need to obtain facts as a basis for plans and action.

8. We need to discover and develop better methods of driver education, enforcement, problem driver rehabilitation, etc., through research.

9. We need to have traffic engineering science used on all our highways, not just on the truck line system, and in all our cities.

10. To do these and many other things which will be required, we must more completely inform all Michigan people about traffic problems, about what is needed to solve them, and about what they can do to help. In the final analysis, the people as voters, taxpayers, pressure groups, or jury members control the rate of progress we shall make. An informed, interested public will see that the needed remedies will be found and financed.

Definite progress has been made in Michigan during the past two years. In the summer of 1955, Governor Williams provided the leadership for an all-out traffic accident prevention program. The Legislature, in its November, 1955, special session, aided tremendously by appropriating funds for 200 additional state police, enacting the state subsidized universal driver education law requiring those under eighteen years of age to pass a driver

education course before obtaining a driving license, establishing the Highway Traffic Safety Center at Michigan State University, and passing a maximum speed limit for rural areas.

In subsequent sessions, the Legislature has appropriated funds for 150 additional state police officers, and enacted legislation providing for county traffic safety schools for problem drivers and others who wish to attend them.

Enforcement by all the police agencies and courts of the state has increased substantially. The Central Driver Record Files of the Division of Driver and Vehicle Services of the Secretary of State's office have been improved substantially. The driver improvement activity of that Division has increased 100 per cent.

Driver Education is now being taught in all the high schools of the state. Hundreds of teachers needed for this program have taken the initial qualifying Driver Education Teacher Course.

Newspapers, radio and television stations have provided more public safety information than ever before.

The Highway Department's road building program has been increased substantially following the passage of the 1956 Federal Highway Act.

The Highway Traffic Safety Center at Michigan State University has assembled a large competent staff and is bringing the entire resources of the University to bear upon the traffic problem. The five-fold activity program of the Center includes:

1. Educating career people for Highway Traffic Administration in undergraduate and graduate courses. Driver Education teachers, highway and traffic engineers, safety organization managers, traffic police administrators are being educated.
2. Training those now holding responsible positions in highway traffic administration. Scores of short courses and conferences have been held for many different groups, such as, engineers, police, judges, womens' groups, teachers, and school bus drivers.
3. Research on many traffic problems for which new or better solutions are needed. Faculty members of many schools and departments of the University are engaged in individual and group research.
4. Field assistance in response to requests of local officials and citizen groups. Qualified resource people from many of the University's schools and departments are aiding cities and counties in solving their traffic problems.
5. Information and materials service. The "You Are The Jury" radio program is broadcast weekly on forty Michigan radio stations. A traffic film loan library comprising 130 different motion picture films is being used by groups throughout the state. A monthly newsletter has been started to provide up-to-date information. Speakers on many traffic subjects respond to requests of many different groups.

These are some of the steps Michigan has taken to decrease the terrible annual traffic toll. Many groups not mentioned in this résumé are contributing staff, time and money to the State's accident prevention program.

The total effort is succeeding. There were 269 fewer people killed in 1956 on Michigan highways than in 1955, and in the first seven months of 1957 there have been 155 fewer deaths than in 1956, in spite of increased travel.

Though this progress is encouraging, much more needs to be done. The number injured in traffic accidents has been decreased only slightly. The steadily increasing amount of travel in Michigan is constantly increasing exposure to accidents. The accident rate per 100 million vehicle miles must be decreased another 33 per cent, if Michigan is to keep from killing 2,000 in the year 1970.

DRUGS AND DRIVING

(Continued from Page 1132)

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Automotive Crash Injury Research in Michigan

By Robert M. Tracy
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ON April 17, 1957, the Executive Committee of The Council of the Michigan State Medical Society endorsed an automobile crash injury research program sponsored by Cornell University Medical College, in co-operation with the Michigan Department of Health and the Michigan State Police. In this new study which was initiated on June 1, Michigan represents the thirteenth state to collaborate in an interstate data-collecting system.

The purpose of this program is to obtain reliable data on the frequency, nature and specific causes of injury to occupants in passenger cars involved in automobile accidents. In addition, these studies are producing medical statistics which promise to implement treatment of auto crash victims through more definitive knowledge of the nature and scope of the problem. Data from other co-operating states have formed a basis by which automobile manufacturers have made important design changes in many 1956 and 1957 passenger cars which are specifically engineered to provide occupant protection during accidents. Reliable information being obtained on the degree of protection offered by these items, which include the seat belts, springproof door latches, energy-absorbing steering wheels, padding, et cetera, is most encouraging.

The interstate research effort differs from previous highway accident studies in that it is seeking information on causes of injury rather than causes of the accident itself. Trauma produced in highway accidents is regarded as the mass disease which is as characteristic of our times as were bubonic plague, typhoid fever, and malaria in previous years. In studying this "disease," an epidemiologic approach has been utilized with the co-operation of medical societies, State Departments of Public Health and State Police groups of Indiana, North Carolina, Virginia, Maryland, Georgia, Connecticut, New York, Vermont, Pennsylvania, Minnesota, Texas, Colorado, Arizona,

California and Oregon. With carefully designed standardized data-gathering forms, the enforcement officers and the medical profession are contributing data from this "laboratory of the highways" to the Automotive Crash Injury Research group at Cornell, where a standard technique of evaluation and analysis is employed to identify the characteristics of the environment which produces trauma.

With the introduction by automobile manufacturers of new door lock designs, energy-absorbing steering wheels, specially designed energy-absorbing padding on the instrument panels and forward overhead structure, as well as safety belts, the epidemiologic approach can now also be used as an objective measuring device to determine the degree of reduction in both the frequency and severity of injury that these changes are providing. Studies of post-1955 automobiles involved in accidents already indicate, for example, that occupants of these cars are experiencing a 29 per cent reduction in risk of dangerous through fatal grade injury. A preliminary evaluation of improved door locks designed to decrease the incidence of ejection (commonest cause of injury in accidents) shows that, in the injury-producing accident study, post-1955 models experienced approximately 27 per cent less incidence of front doors opening during accidents than did pre-1956 models. A direct result was an approximate 50 per cent cut in the frequency of occupant ejection. Occupants of these newer model automobiles have been found to sustain nearly 30 per cent less dangerous through fatal grade of injury.

It has been demonstrated, also, that properly engineered and installed seat belts can provide a remarkable degree of protection. The most marked improvement was seen in the prevention of ejection and its associated injury risks. Although continuing studies are expected to increase the knowledge of the precise degree of added protection the seat belt may be expected to afford, present findings show that their use can reduce

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injury rates somewhere within the range between 30 per cent and 60 per cent (depending on the type of accident and other factors).

Studies in Michigan are expected to represent



Fig. 1. Michigan Sampling Plan, First Period.

an important addition to the interstate program in its continued effort to evaluate safety design changes and to produce data which can be useful as a basis for planning further safety design improvements. Standard statistical sampling techniques are employed involving the investigation of all injury-producing accidents in selected sampling areas. Individual areas are studied for periods of six months each and the Michigan study is scheduled for a tenure of at least two years. The accompanying illustration shows the areas currently

under study. Mechanics of the program require that state police investigators fill out special reports for all injury-producing accidents in the shaded areas. In the larger sections, labeled "5" and "6", studies are confined to investigations of 1956 and 1957 model automobiles only. Following his investigation of the accident, the state policeman notifies the doctor or hospital having charge of accident victims that these cases come within the scope of the study. All physicians in these areas have been appraised of the study through letters from Dr. Arch Walls, President, Michigan State Medical Society. Hospital administrators and their staffs have received further instructions from Cornell field personnel.

Medical forms are brief and do not require much of the physician's time. Upon completion they are mailed to the Michigan State Department of Public Health to be matched with related police reports and special photographs illustrating car damage details and injury causes before forwarding to Cornell for analysis and statistical use. Earnest participation of the medical profession in this effort, which is aimed at solving one of the nation's foremost epidemiologic problems, is urgently requested. Unless the injuries of each person hurt or killed in the passenger car accident within the sampling areas is carefully recorded, the effectiveness of this study and the value of the subsequent data obtained may be seriously reduced.

These studies are sponsored by the Armed Forces Epidemiological Board through its Commission on Accidental Trauma, with funds supplied by the Surgeon General of the Army, by the Division of Research Grants of the United States Public Health Service and by grants of unrestricted funds by the Ford Motor Company and the Chrysler Corporation.

By collaborating with Automotive Crash Injury Research, the physician will be furnishing the basic medical data necessary to combat this epidemic problem. Only with valid medical data can this mass disease be successfully attacked.

Gastroscopy should be employed: (1) where routine studies fail to reveal a positive diagnosis of gastric diseases; (2) as a supplementary aid to x-ray diagnosis; (3) to follow the course of certain benign conditions which may become malignant.

The asymptomatic period in esophageal and gastric cancer is much longer than has been supposed. There is reasonable evidence indicating that gastric lesions, at least, are probably one and a half years old or even older when symptoms first appear.

Traffic Accidents and Safety

Transportation of the Injured

By George J. Curry, M.D., F.A.C.S.
Flint, Michigan

THE AUTOMOBILE, like the atomic bomb, must be controlled. Trauma rates high as a killer. The automobile kills about 40,000 yearly and injures 1,300,000. It is the greatest cause of death in children up to the age of fourteen. The medical profession can unquestionably make a great contribution to traffic safety as a logical element of its work in the field of preventive medicine. This is a significant extension of the profession's more obvious and direct concern with the care of persons injured in traffic accidents. Public officials, professional traffic safety authorities, the automobile industry and other interested groups welcome the increasing participation of medical men in this field in all appropriate ways.

Few would deny that some of the most brilliant achievements of modern medicine lie in the field of preventive medicine. The medical aspect of traffic safety is in this category. There may come a time when the issuance of a driver's license will include a more detailed appraisal of the physical defects of the applicant.

The one and one-third million persons injured in traffic accidents become the direct responsibility of the medical profession. This responsibility is closely divided into phases. It must be emphasized, however, that the care of the injured person is basically a continuous process, from the time of sustaining the injury, to discharge, following rehabilitation.

Healing of tissue following an injury begins the first minute. Good immediate care and safe expeditious transportation of the injured become the first and very important phase in the care of these victims. The fate of the person and his injuries is often decided during this time. The quality of handling and transportation may be the deciding factor in whether a person with a relatively simple injury makes a full early recovery, or whether this simple injury is converted into a complex situation resulting in a long re-

covery period with permanent disability or even death.

A survey of the quality of transportation of the injured was made covering the years 1949-1953. Sixty-two cities, large and small were thus investigated. Fair to poor handling was found in 25 to 28 per cent. This information has been previously reported in published articles.

During the past five years there has been increasing interest directed toward improvement in transportation of the injured. Subcommittees on transportation of the injured have been active at all levels, national, state and local. These are part of the objectives of an educational program projected by the American College of Surgeons through its Committee on Trauma.

The immediate care and transportation of the injured is in the hands of the ambulance attendant. It seems logical, therefore, that concentrated attention should be in this direction. His education should be an important objective of any medical group. It is obvious that he should first be selected on the basis of good character and dependability. Special instruction can be easily arranged through the Red Cross courses anywhere. If this is not possible, special organized lecture and demonstration courses may be given by hospital house staffs and other medical groups. To maintain his interest and enthusiasm, regularly scheduled meetings should be held where definite transportation problems are reviewed. City ordinances requiring proficiency certification of ambulance attendants are increasing in number throughout the country. At present, there are fifteen in operation, with ten under planning.

The Flint Ordinance has been in continuous operation since 1949, first obtained in 1942, but discontinued during World War II because of help shortage. Marked improvement in the quality of transportation of the injured has resulted. A record of 27,000 ambulance transportation cases to the Emergency Receiving Department, Hurley Hospital, showed only seventy infractions. Flint

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The Speeding Ambulance

By George J. Curry, M.D., F.A.C.S., and
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Flint, Michigan

DURING the past few years considerable criticism has been directed toward the speeding ambulance. Panic by the uninformed is behind the widely held fallacy that speed in getting an accident victim to the hospital is important. Prompt immediate care may be vital, but speed merely increases the injury and accident hazard. Dr. Basil C. MacLean, New York City Commissioner of Hospitals, has been quoted, "The average patient would get there soon enough by parcel post."

Since 1941, Flint, Michigan, has had an ambulance ordinance requiring ambulance attendants to be certified as to their proficiency in immediate care and transportation of the injured. However, even under the ordinance speeding was permitted whenever the drivers thought it necessary. This resulted in several ambulances racing to the scene of the accident. The last one to arrive usually left empty-handed.

During the summer of 1949, an ambulance ran a red light and collided with a convertible coupe killing the twenty-four-year-old ambulance attendant. Three weeks later an ambulance driver for the same company, traveling at an estimated seventy miles per hour, ran a red light and crashed into a tank truck. The driver was also killed.

A new program incorporating the following was then put into effect.

1. A central dispatching system under control of the police department assigns ambulances on all emergency calls.

2. The independent ambulance companies are assigned to specific zones. The morticians' ambulances serve as a second line of defense.

3. The ambulances are limited to a top speed of thirty-five miles per hour.

Opinions have been expressed by various groups regarding the necessity of speed in transporting the injured. The general impression among lay people is that speed is necessary in saving lives. The opposite view is expressed by some of the

members of the medical profession who feel that the sirens should be removed from the ambulances, and all traffic and speed regulations should be obeyed even to the point of waiting for red lights.

An ambulance averaging thirty miles per hour would require ten minutes to travel five miles. To save five minutes, sixty miles per hour would be necessary. In 2,500 consecutive ambulance runs this time interval would not have influenced the course of a single injury.

Time trials under different traffic conditions were carried out over a 4.4 mile stretch of a usual ambulance route. An ambulance with the right of way should be able to travel this distance in less than ten minutes without speeding. The shortest trial, obeying all traffic laws, was thirteen minutes; the longest twenty-eight minutes. When this delay is added to that necessary for the ambulance to reach the accident scene, the travel time becomes significant.

A four-year-old child was apparently injured by the gear shift lever and sustained an open wound of the neck associated with bilateral pneumothoraces, and fractures of the thyroid cartilage, cricoid cartilage, and upper two tracheal rings. The child was cyanotic upon admission to the emergency receiving department. Prompt measures restored the patient's airway, and she survived. The total elapse of time between the dispatch of the ambulance by the police department and the patient's arrival at Hurley Hospital was twelve minutes. The accident occurred a little over a mile from the hospital, and transportation was accomplished without excessive speed. Had the transportation time been increased by many minutes, it is probable that this child would not have survived. This is the only case in this series where a moderate delay could have resulted in death.

Of these 2,500 cases, twenty-seven persons were dead on arrival. Five of these died of fracture dislocations of the cervical spine with complete transection of the cord above the 4th cervical

From the Section for the Surgery of Trauma, Hurley Hospital, Flint, Michigan.

vertebra. Twenty died of severe craniocerebral, chest, and internal injuries. There was one strangulation by hanging and one drowning. None of these could have been saved by a speeding ambulance.

Thirteen persons expired in the emergency receiving department. These apparently died from head and chest injuries, although other multiple injuries were present.

Postmortem examinations performed on those who died of severe chest injuries revealed combinations of rupture of the diaphragm, fractures of the liver and spleen, lacerations of the aorta, inferior vena cava, and the heart. Those not autopsied presented external evidence of severe injury.

It is believed that none of these victims, who were dead on arrival or who expired in the receiving department, would have survived had their injuries occurred on the hospital door step.

In only forty-five persons was the time interval between that of the accident and the arrival at the hospital considered to be significant as far as the course of the injuries was concerned. In these cases, expeditious handling of the victims was desirable, but the speeding ambulance considered unnecessary. In nine of these accident victims a wild, weaving, siren-screaming ride to the hospital might have produced death or permanent invalidism. These included seven cases of multiple rib fractures associated with unstable rib cages and

pneumothoraces, and two fracture dislocations of the cervical spine.

The other thirty-six victims were in severe states of shock at the time of their arrival at the hospital. The shock was produced by fractures of the liver and spleen in five cases, and multiple fractures of the skeletal system in eighteen, superficial lacerations in eight, and penetrating wounds of the abdomen and chest in four, and one burn. The degree of shock in any of these cases may have been increased by a rough ride in an ambulance.

In this series of 2,500 consecutive ambulance runs, haste in transporting the injured was unnecessary in 98.2 percent. There would have been no difference in the outcome of 2,455 patients had they been transported according to standard traffic regulations.

In 1.8 percent expeditious handling was considered necessary, but a speeding ambulance could have increased the severity of the injuries.

It is recommended that:

1. Ambulances in transporting the injured person should observe the local speed laws of the vicinity in which they are traveling.
2. They should retain the use of their sirens.
3. They should have the right of way in traffic.

The patient deserves a safe, expeditious ride to the hospital.

TRAFFIC ACCIDENTS AND SAFETY

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ambulance attendants are required to carry cards indicating proficiency certification, at all times. They expire in one year and are reviewed following the annual meeting of all ambulance attendants, held in December. In addition, windshield stickers bearing the co-sponsors, American College of Surgeons and Flint Committee on Trauma, American College of Surgeons, are presented to attendants having a good record.

A chart bearing patient's name, age, sex, diagnosis, quality of transportation and ambulance attendant's name is kept in the Emergency Receiving Department, at Hurley Hospital. Three repeated infractions disqualify the attendant. Rein-

statement occurs after re-examination and investigation. Ambulance inspection, for proper equipment, takes place at regular intervals, throughout the year, by the special instructor for ambulance attendants through the American Red Cross.

Recommendations:

1. Organized educational programs for ambulance attendants.
2. City ordinances requiring certificates of proficiency for ambulance attendants.
3. Hospital receiving department charts indicating the quality of transportation of each case.
4. Continuous interest in this important phase of the care of the injured person.

Whiplash Injuries

By Frank H. Mayfield, M.D.
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WE DISLIKE the term "whiplash injury," for it has come in many circles to imply knowledge of anatomic and physiologic disorders of the human neck that are not known. It is not unusual in semantics for words to undergo mutation; for example, the word "pituitary," which literally means "slime," has come to identify the master gland. And now "whiplash," which was introduced to describe the forces to which the neck is vulnerable, is in a sense becoming a master hoax. Diagnostically, it is no more definitive than is "headache" or "bellyache." Yet it occurs frequently in medical histories, particularly in connection with traffic accidents, and is quoted quite commonly in the courtroom. There seems to be a popular trend to catalogue under this title all unexplained symptoms which follow cervical trauma.

In our opinion, the term is used improperly if it does more than describe the nature of the force to which the patient is exposed. We would not infer, however, that patients whose necks are wrenched by whiplash or direct blow may not suffer disabling injuries. Indeed, we hope to present evidence that is quite to the contrary, for we share the view of Sir Edward Appleton, the noted physicist, who said in Cincinnati recently: "There must be something the matter with the man who goes to the doctor when there is nothing the matter with him." We would add that there is probably little the matter with the man who goes to his lawyer when there is something the matter with him—unless perhaps he has "legal mortis," an apt phrase employed in a recent issue of the *Virginia State Medical Journal*. We are not alone in realizing the extent to which "whiplash" is misused; yet this stock phrase has caught on so widely, that we cannot hope to abolish it from our vocabulary. The best we can do, probably, is to bend our efforts to restoring proper meaning to the term by defining some of the underlying disorders responsible for the symptom complexes it is used to describe. With this in mind, we would draw attention to certain features of the anatomy

of the cervical spine that render this area more vulnerable to trauma than other parts.

Trauma to the cervical spine may be of sufficient severity that disabling symptoms are noticeable at the moment of impact. These symptoms may persist. They may arise from fracture, ruptured disc or torn ligaments and seldom constitute a difficult diagnostic problem. Experience is sufficient in cases of this type to indicate a definite line of therapy and also to form a prognostic estimate with reasonable accuracy. It is the patient who suffers what appears to be a mild injury, but who then becomes progressively disabled with headache, neck pain and/or arm and shoulder pain, and emotional instability that tests one's clinical judgment. It is this type of trauma, with delayed development of symptoms, that requires the most careful analysis, lest tissue changes that might respond to therapy be overlooked or lest the examiner by evincing concern either add to the anxiety of the injured or be duped into documenting the false claim of the malingerer.

Our general concept of pain transmission can be summed up very briefly: If a major noxious stimulus is applied to a sensory nerve, the pain is felt in the dermatome or segments supplied by that nerve. This is the case, for instance, with ruptured disc or fracture. But if a nerve receives repeated small stimuli (such as massage), each stimulus may not register clinically. After many such stimuli, however, the nerve becomes sensitized and mass response is initiated. This reaction results from the summation effect of subclinical stimuli. It is the chronic bombardment of peripheral nerve trunks due to mild massage that would appear to account for the pain referred into the head, neck and/or arm; vasomotor changes that are noted in the eyes, nose and ears; and the many subjective symptoms that appear to be referable to the brain.

In 1949, one of us (FHM) and C. R. Hunter presented the data from eleven patients who had undergone section of the sensory root of the second cervical nerve or who had had the greater occi-

pital nerve avulsed for hemicranial pain. These patients, for the most part, had been well until sustaining an injury in which the neck was forcibly wrenched. They gave a history of more or less constant discomfort post-traumatically in the suboccipital region on the side involved which they had come, over the months or the years, to accept as their normal lot. But upon this chronic discomfort, severe paroxysms of hemicranial pain were superimposed. Usually, the bouts of severe pain involved one side of the head, and always the same side. Occasionally, when an attack was most severe, the pain might spread to involve the entire head. Ordinarily initiating in the suboccipital region, the pain would radiate to the vertex, the temporal area and to the area about the eyes. The attacks tended to be sudden in onset, often occurring at night, and were associated with tearing of the eyes, flushing of the face, alteration of sweat, and (at times) occlusion of the nasal passage on the side involved. Some patients showed constriction of the pupil on the painful side. A few had lancinating pain in the face associated with these bouts. Most patients were conscious of numbness and tingling of the parieto-occipital area of the scalp. Some of them complained of vertigo and a sense of dizziness during severe paroxysms.

Our investigation of these operative cases was based upon certain unusual features of the anatomy of the upper neck. The first and second cervical nerve roots emerge behind the lateral articular masses. Posteriorly, the roots are not protected by pedicles and facets which elsewhere in the vertebral column complete the root canal. There is relatively little range of motion between the atlas and the occipital bone. And since the sensory component of C 1 is so rarely present, it is unlikely that this root often plays a part in the production of symptoms. The joint between the atlas and axis, however, is highly movable and the anterior primary ramus of C 2, even under normal circumstances, is subject to unusual stress. The posterior primary ramus of C 2 which continues into the scalp as the greater occipital nerve emerges between bony surfaces and is capable of being crushed or traumatized by any movement of the head which would tend to approximate these surfaces. Within the normal range of motion of the neck, the second cervical nerve probably is not vulnerable to trauma. It would appear, however, that if added force were applied

to the neck when it was already at its limit of normal range, such as occurs with the usual whiplash injury, damage to this structure could occur. It appeared reasonable to assume that once traumatized, structural changes in the nerve sufficient to render it painful under otherwise normal circumstances might occur. Plausibility was added to this assumption by the fact that our observations following section of the root indicate that the area of supply of the second cervical nerve is greater than the textbooks record. Accordingly, when one considers this peculiar vulnerability of the second cervical nerve root to trauma, in connection with the fact that the second cervical nerve supplies sensation to the major portions of the scalp and overlaps considerably into the face area, it seems reasonable to assume that this structure may be responsible in certain instances for unilateral head and/or face pain.

The original study reported eight cases in which symptoms were initiated by trauma; these patients were relieved by surgical treatment and (as far as can be determined) have remained well. The three patients whose symptoms were not precipitated by trauma were not benefited; indeed, it must be acknowledged that their situation may have been aggravated by the surgery. At the present time, 108 patients have undergone section of the sensory root of the second cervical nerve; and thirty-six patients have had the greater occipital nerve avulsed. Some of these subsequently have had root section. Sixty of the 108 treated with section of the second cervical nerve are totally relieved and approximately one half of those treated by avulsion of the greater occipital nerve have been afforded temporary relief for a period of months. In certain instances, intraspinal section of the nerve root has also been necessary. Our overall experience with such patients has diminished the hope which we held at the outset that interruption of this nerve pathway might resolve the problem of the majority of patients who suffer with this syndrome. On the other hand, we are convinced that this is the source of pain in some patients who suffer with intractable unilateral head pain after trauma. It is our belief that section of the second cervical nerve root or avulsion of the greater occipital nerve can be undertaken with reasonable confidence that relief will follow in the patient disabled with post-traumatic intractable suboccipital and hemicranial pain, provided that prior to injury he was symptomless and

provided too that the following circumstances prevail: (1) pain and tenderness in the region of the second cervical nerve root and the greater occipital nerve, upon which are superimposed disabling bouts of severe pain, perhaps exaggerated by movements of the neck (particularly on looking upward) or by sleeping posture, and perhaps increased by emotional tension; (2) substantial reduction in pain sensation, as demonstrated by pinprick, over the area of supply of the second cervical nerve; (3) aggravation of symptoms by passive movements of the neck which tend to approximate the lamina of the first and second cervical vertebrae.

Naturally, the patient who is emotionally unstable before trauma is not immune to this syndrome; and consideration must also be given to the problem of the patient with a secondary anxiety state triggered perhaps by pain or hostility toward the employer or the driver of the second car involved in the accident in which he was exposed to injury. Such individuals, conceivably, might be motivated by a selfish desire for financial gain. It is not our intent to minimize or ignore their suffering. It is simply that no ready formula exists for dealing with them. That stanza from the *Rubaiyat*, "Which is the potter, pray, and which is the pot?" voices the dilemma, and it is not lack of sympathy or compassion for them that causes the clinician to leave such patients to their unhappy lot.

Evidence used to confirm our observations in reference to this syndrome is chiefly clinical. In only four patients in the series have x-ray studies of the atlanto-axial joint revealed any abnormalities. We have been able, however, to reproduce the symptoms listed above during operation performed under local anesthesia by stimulation or traction upon the greater occipital nerve (if avulsion were being done). In our early cases, an attempt was made to gain information by stimulating the nerve root intraspinally while operating under local anesthesia. When the second cervical nerve was stimulated, pain was referred to the vertex and to the region behind the eye. When the third cervical nerve was stimulated, the pain was referred to the region about the ear and along the lower jaw. Pathological sections of the avulsed fragments of the greater occipital nerve usually have shown some fragmentation of the myelin and in one or two there has been fusiform enlargement of the nerve. Sections of the sensory root have

not demonstrated sufficient organic change to be convincing.

When doubt is present as to the syndrome, avulsion of the greater occipital nerve is carried out rather than intraspinal section. It is our practice to follow the nerve deeply into the neck and then to pull it with the hope that the sensory fibers will be pulled out of the cord or at least out of the ganglion. This procedure also interrupts the motor fibers and leads to mild atrophy of the suboccipital muscles. Aside from this, however, no untoward effects need to be expected. Exceptions to the rule do exist; there have been occasional reports of paraplegia following this procedure. Perhaps this is a risk that must be run and it is debatable whether such isolated instances should deter the surgeon from performing avulsion. In cases where the patient has been relieved temporarily and subsequently the return of sensation causes the renewal of pain, we have then attacked it intraspinally.

It is not our practice, however, to operate upon all patients who present the findings described above. Fortunately, the symptoms of most patients in this group subside spontaneously or after reassurance, rest and head halter traction. It is possible that the newer tranquilizing agents may enable one to control the superimposed anxiety symptoms to the extent that we can make a more accurate appraisal in the future. We reserve surgical treatment for those patients whose symptoms do not respond to conservative measures. Avulsion is then resorted to, since it is not unlikely that most post-traumatic head pain may be transmitted in part at least through these nerves. It is no less likely that the head pain of the tension states also is transmitted through these structures. In the hope of determining more accurately the role of this root in all forms of hemicranial pain, we have operated upon some thirty patients with various types of pain involving one side of the head and/or face. With rare exceptions, surgery has been ineffective. Results have not been significantly different in the industrial group as compared to those patients whose injury could not possibly represent a source of financial gain to them.

Case Reports

Case 1.—M. L., a white woman, aged seventy-seven, was first admitted December 3, 1951, with a history of pain in the left mastoid region with radiation into the left jaw and forehead. Physical examination was com-

patible with the second cervical nerve syndrome. On December 4, the left greater occipital nerve was avulsed. The postoperative course was uneventful, and she was discharged on December 11 asymptomatic.

She remained asymptomatic until December, 1956, when following a fall in which she received a mild head injury, she had a recurrence of her pain. Again the pain began in the left mastoid region with radiation to the forehead. The pain was mild at the onset, but with time became progressively more severe. She was readmitted on March 7, 1957.

Physical examination, on admission, showed the left posterior neck and scalp to be tender to touch with marked tenderness over the greater occipital nerve. The scalp distribution of the greater occipital nerve showed hypalgesia to pinprick and there was the scar from previous surgery. On March 8, the greater occipital nerve which had regenerated was again avulsed. The postoperative course again was uneventful and she was discharged on March 12, 1957, asymptomatic, and has remained so.

Case 2.—A. W., a young white woman, aged twenty-six, was admitted on May 2, 1957, with a history of being in an automobile accident eight or nine years ago. She did not remember whether or not she received a neck injury at this time.

She was asymptomatic until two years prior to the present admission, when she developed a dull ache at the base of her skull. This ache persisted and one year prior to admission the ache became more severe and radiated to the top of her head. The pain was relatively constant but the intensity varied and the severity increased up to the time of admission.

Physical examination showed tenderness over both greater occipital nerves and hypesthesia in the C 2 distribution bilaterally. On May 7 a cervical laminectomy was performed and the posterior roots of the second cervical nerve were cut bilaterally.

The postoperative course was uneventful, and she was discharged free of headache on May 15, 1957, and has remained so.

Case 3.—L. R., a white woman, aged sixty-three, was admitted on March 9, 1957, with a history of being in an automobile accident in September, 1955. In this accident, she sustained a mild injury to the left side of her head and neck. Following this she developed pain located at the base of the skull and the left posterior half of her head. The pain remained constant for three months, then subsided for a few days, only to recur. The pain then persisted until the time of admission.

Physical examination showed tenderness over the left greater occipital nerve and hypalgesia in its distribution. On March 12, a second cervical posterior root rhizotomy on the left was performed. The postoperative course was uneventful and she was discharged asymptomatic and has remained so.

The above case histories involved injury to the second cervical nerve. The lower cervical joints

differ substantially from other joints in the spine in that, instead of three joints—two facets and one intervertebral joint—there are five. In addition, two are synovial joints that in part surround the disc, particularly in the area of the root canals. They are spoken of as the lateral vertebral joints of Luschka. These are not present elsewhere in the spine. They are subject to inflammatory and traumatic reactions, as is any synovial joint, and when inflamed or traumatized, they heal by calcium deposits within the synovia; and these calcium deposits narrow the root canals through which the cervical nerves emerge. When the canals are narrowed, the nerve root is subject to massage with each movement of the neck.

We are now in the process of reviewing the histories of patients who have been operated upon for removal of cervical disc for the purpose of determining the incidence of head pain associated with this disorder and the incidence of relief following removal of the lesion. The statistical analysis has not been completed; but it is our impression that the coincidence of headache with these lesions and the relief of pain following their surgical removal is substantial. We are unable at this time to define with confidence methods of diagnosing this disorder or of clarifying the paths of transmission, except to recount possible pathways which may play a role. There are communicating branches from the cervical plexus to the vagus and hypoglossal nerves from both C 1 and C 2. The superior cervical sympathetic ganglion has direct communications with cervical roots one to four.

Corbin and Hinsey have shown by degeneration experiments in cats that the ascending sensory branches of the upper four cervical nerves ascend dorsomedial to the substantia gelatinosa of the upper cervical cord and in a similar position with relation to the spinal tract of the fifth nerve in the medulla, terminating at the level of exit of the glossopharyngeal nerve. Connections are made along the way with the intermediate nucleus of the medulla and with the cuneate nuclei, the fasciculus solitarius and the descending vestibular nucleus and tract. Foerster has demonstrated that stimulation of the distal cut end of a dorsal root produces vasodilatation in the dermatome. Bridges recently has confirmed this for the cervical roots. There are intimate communications between the sympathetic chain of the neck and the roots and

it is not unreasonable to presume that bombardment of these structures with painful stimuli is sufficient to induce secondary autonomic changes in the head and face, such as reddening of the eyes

Case Reports

Case 4.—N. M., a white woman, aged forty-three, was admitted on September 21, 1956, with a history of being in an automobile accident in June, 1955. In

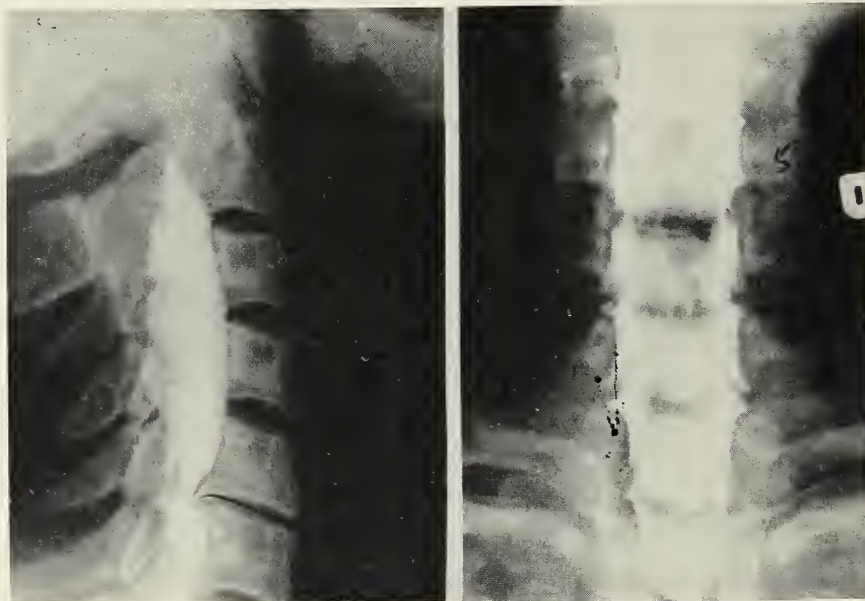


Fig. 1. Case 4. Myelogram showing defect in the oil column at C 5-6 level on the right.

and edema of the nasal mucous membrane.

Inasmuch as the synovial joints of Luschka surround a large part of the discs in the cervical area, the discs are necessarily smaller than the other parts of the spine and do not extend to the lateral margin of the vertebrae. Hence, extrusion of the disc is less frequent, the posterior margin of the joint space in the cervical area is more narrow than the anterior, which further lessens the likelihood of disc extrusion. Disc extrusions do occur, however; and when they do, they are apt to induce symptoms immediately after trauma, which may of course subside with rest, traction, and immobilization; but usually they produce a characteristic clinical picture of pain in the neck, shoulder and arm, along with certain areas of sensory, motor and reflex defects in the painful extremity. They may in addition induce chronic head and neck pain, but this is not necessarily so. In contrast to this, the gradually increasing calcium deposits in the joints of Luschka subject the patient to pain long before definite root phenomena are demonstrated, for usually these signs do not appear until the circulation of the roots is interfered with.

this accident, she received a whiplash type of injury to her neck. Following the accident, she developed pain in her right neck and shoulder and a right-sided headache. These symptoms persisted, varying in intensity, but showing a progressive increase in severity. She had been hospitalized elsewhere in October, 1955, and June, 1956, and had received conservative therapy without significant improvement.

Physical examination showed the upper extremity to be subjectively weak in all muscle groups. Neck motion was restricted and painful. Myelogram showed a defect in the oil column at C 5-6 level on the right (*Fig. 1*).

On October 2, a cervical laminectomy was performed and a calcified mass removed from the interspace between the fifth and sixth cervical vertebrae on the right. The postoperative course was uneventful and she was discharged asymptomatic and has remained so.

Case 5.—M. H., a white woman, aged fifty-one, was admitted on February 12, 1957, with a history of pain in the left face of twenty-five years' duration. This had been intermittent, lasting hours to days.

In 1952, she developed pain in the left shoulder and neck. This was treated by traction with improvement of the neck and shoulder pain. The face pain, however, became worse and remained constant up to the time of admission. During this time, she had consulted many doctors and had received many kinds of therapy including alcohol injection of the nerve supplying the face.

(Continued on Page 1161)

Emotional Problems in Driving

By John M. Dorsey, M.D.
Detroit, Michigan

During the year I have emphasized three vital subjects: the personal touch in medicine, the necessity for freedom in medical practice, and professional unity. . . . The cold, brisk, and impersonal attitude toward patients is on its way out, and I say good riddance.

DWIGHT H. MURRAY, M.D.*

"and the drivers are stupefied. They are in confusion in the ways the chariots jostle one against another in the streets: their looks are like torches, like lightning running to and fro."**

IN PRODUCING and assembling my views on this topic of motion and emotion, I reminded myself again and again of the necessity to maintain a good-natured attitude in such tooling up, the number of traffic fatalities occurring on a holiday week-end giving my imagination many a gloomy detour.† It occurred to me that a most appropriate patron saint of the motorist might be one who was tortured on the wheel, a kind of martyr to the cause. My country's rolling economy has its awfully wonderful aspect. The traffic scene in the United States is such an enormous one that it can be comprehended only in a piecemeal way, such as: some seventy-million drivers, some sixty-million motor cars, some three and one-half million miles of roadway.††

To recover my proper medical balance of oneness, hope, and cheer, I acknowledged my deep appreciation for my trusty car and my increasing devotion to safe and sane automobile living. A gratifying experience which, in every instance of it, serves to give me a new lease on life, is to ob-

From Wayne State University College of Medicine, Detroit, Michigan.

*From presidential address before the House of Delegates: *AMA Journal*, 164: No. 8, June 2, 1957.

**Prophecy from the Book of Nahum, II, 3-4, 600 B.C.

†"During the past year, over 35,000 individuals were killed, and almost a million injured in motor vehicle accidents in the United States. In the armed forces alone, 1,610 persons were killed and another 10,360 injured in off-duty driving accidents. The economic cost of accidents through property damage, injury and lost time is staggering. In 1954, estimates for the country as a whole ranged as high as 4.5 billion in direct costs, and another 15.5 billion in indirect costs. The armed forces have computed that the average fatal accident of a serviceman costs the government \$43,000."—John J. Conger, Ph.D., et al: *Personal and Interpersonal Factors in Motor Accidents. The American Journal of Psychiatry*, 113: No. 12, June, 1957.

††A most helpful book prepared under the leadership of Edward W. Pepyne, Driver Education Consultant: *Man and the Motor Car*, Fifth edition. New York: Prentice-Hall, Inc., 1954.

serve myself extending my study and practice of civilized living to include my riding a curve, making a light, or "putting the show on the road" generally. It is truly a sight for sore eyes to observe a driver whose interest in the love that passes understanding transcends his infatuation with the car that passes others.

Every physician is a physician basically by virtue of the value he places upon human life. From the time of Hippocrates, medical orientation has recognized that human life implies human individuality. It is an established fact that, *up* through the ages, human leadership in every other educational direction has been beholden to medical leadership, specifically to the physician's fidelity to the individual variant as the vantage point of his study and practice. Now again in the diagnosis and treatment of his traffic ills, the physician is foremost in seeing clearly that every traffic problem is necessarily a problem to a given individual.

Of all of the many ways in which traffic emotional problems might be presented, I choose this personal way of considering each one of them as entirely my own, for I regard it as the ideal medical scientific "method of choice."

Since traffic violations number well over ten million a year, since well over one million Americans have now been killed in automobile accidents involving chiefly collision and car out of control, since this distressing emotional picture of traffic toll of human life follows regularly its grim pattern year in and year out, and since traffic safety campaigns have always proved effective in evolving new methods, therefore may it be now just the ideal moment for every physician to point out, and *keep pointing out*, that responsibility cannot be lived in any way whatsoever except in a single solitary human individual!***

***The cry, "Get a horse," is no solution. The driven horse was a far greater killer than the automobile. See Reginald M. Cleveland, and S. T. Williamson: *The Road Is Yours*, New York: The Greystone Press, 1951. A fascinating account of the "men of stout heart whose vision and courage set America awheel."

Every motorist and pedestrian needs to grow in himself what corresponds, in the illusional and untenable language of "intercommunication," to a thorough "public-relations selling job" on the head of fixing responsibility where it is to be found, within himself. If, and when, responsibility is thus lived sanely, all insane guilt or blame is renounced.

Perspective

When a man dies, it means that a part has worn out.—HENRY FORD.

It is desirable that every mind cultivate an appreciation of how and why scientific method is both an issue of, and a way to, progressive life. Modern scientific living bases itself upon observation. The views of automotive living expressed here are intentionally individualistic, purposefully selfish, professionally personal. I might as well hide myself in Latin or Greek as in a vocabulary of "eloseness" or "otherness" or "externality" which appears to rule me out. Calling any part of my own living "not mine", is a self-evident instance of being unable to call that part of my soul my own.

As a culmination of my thirty-two years of work as a medical educator, I find my sources of greatest emotional helpfulness to lie in my insights, my observations which I am able to recognize as taking place in my own mind. Every kind of living which passes for mental disorder, including emotional instability, is traceable to insight deficiency, to living myself inside out, without realizing that what I call "outside" is lived only inside of me.† Every kind of living which I sense as representing mental health and strength is traceable to insight sufficiency. However, as Shaw said, "I dislike feeling at home when I am abroad." Neither my likes nor dislikes, about any traffic necessity of mine can alter the reality of it to the slightest degree.

It is but natural, therefore, that I attempt the treatment of any and every kind of problem in my world from the standpoint of exposing it to the intimate view afforded only by my personal living of it. My every thought has emotional property and, in that basic sense, any and every traffic problem of mine may be conceived as an emotional one. My world is as my mind creates it and views it. In this sense it may be described most accurately as a psychological world. The world of myself, my world which has any and all meaning

for me, may be considered as observable by my mind's eye. From the vantage point of literal medical pyrrhonism, I will proceed to "have a look" at certain of the emotional aspects of motoring, specifically with an-eye for: What difference does it make if I see my world traffic problem as my own or not? How can I make sure that I contribute to my world's peaceful driving?

Since thick traffic, especially, is a mob scene, having in it all of the potential disorder of mob living of each driver, self-conscious living is clearly the specific antidote for everyone to employ, if he will spare himself the insanities of a mobster. This is a hard saying, to myself, but I find my driving much harder without the courage for this emotional and intellectual honesty. Furthermore, to maintain the driving improvement which this insight affords me, I must practice the exercise of it, as in this writing: earnestly, faithfully, systematically. Any of my alleged science which disregards the only basis for its being, self observation, for me, is true quackery.

Accidents as well as sicknesses will happen. It is impossible for any accident or sickness to occur unless every force necessitating it is present and working. The term "accident," as well as "sickness," may be seen as a costly misnomer. It is healthful to be able to view every accident or sickness kindly, in the sense that it reveals life-saving insights. I have found it helpful to renounce my attitudes of "fighting" accident or disease in favor of peacefully studying it, so that I may profit from the life-preserving lesson which the careful and caring investigation of it provides.

As a physician, renouncing extraordinary professional driving privileges, I may not well overlook the study of my, including my patient's, whole condition for driving. An awakening to this kind of safety consciousness is part of the reward for every doctor's self-contained scientific interest in, and reverence for, the majesty of man.

"Physicians ride the highways daily, and few groups exceed them in the frequency of use of motor vehicles. Therefore, they know at first hand that physiologic and psychologic factors determine the fitness of drivers, their reflex movements, the adequacy of their training, and, perhaps most important, their awareness of their own health limitations, including factors relating to mental health."*

*Irving Graef, M.D.: Physicians and Automobile Accidents. See helpful reprint on Symposium, Medical Aspects of Motor Vehicle Accident Prevention, *New York State Journal of Medicine*, 56: No. 24, Dec. 15, 1956.

†John M. Dorsey, M.D., Living Education. *Michigan Educational Journal*, April and May issues, 1957.

The study of my mind is always good medicine when it seem to be too narrow, and an excellent antidote for any philosophizing about any life which is not clearly my own. All automotive living is in every instance nothing but the emotional living of an individual human being.

"To understand both the healthy and the malignant emotional patterns, how they operate, in whom, when, and to incorporate the findings within a logical over-all theory of accident phenomena will be a great accomplishment indeed. It is hardly necessary to add that such an accomplishment will not come about overnight. The answers, as most of the answers involving human behavior, will come slowly and piecemeal."**

Temper Is Too Valuable To Lose

The fact is this: the lonely man, who is also the tragic man, is invariably the man who loves life dearly—which is to say, the joyful man.—Thomas Wolfe.†

Much, as well as little, is known about emotionality; "much," in that every bit of it is of vital importance, "little," in that there evidently remains far, far, more to be discovered. This much, however, is already clear: an emotional block is always a potential traffic block; an emotional attack, or blowout, is always a potential traffic accident: impoverished emotionally, so-called "bloodless" living, favoring indifference and carelessness, is always a potential fatality; a rich, ranging, resilient emotional person, capable of living self-composedly each of his feelings in all of its quantities, is the potential ideal motorist.

Pain of any kind or degree is a life-saving sign that I am endangering my existence. Unhappy emotions are forms of self hurt. Each of my painful emotions may be reviewed as being a signal to me that I am not living enough of myself sufficiently consciously. Thus, fear always involves my regarding my somebody, or something, else as not mine, and hence as potentially destructive; hate always signalizes the same kind of dissociation—my hating, or being hated by, "another"; guilt is a form of self hate deriving from my feeling unworthy before my "other one"; envy is my effort to compensate for my ignorance that my superior other one is lived entirely by me; jealousy is a sign that I have dispossessed myself of love; shame is my sense of embarrassed self, a compensation for my lack of insight that

all exposure is self-exposure; disgust is my feeling of revulsion unconsciously connecting me with a part of my repudiated self which I would expel; distrust, doubt, suspicion, superstition,—each is clearly a feeling signalizing my repudiation of my own self power.

Human living is emotional living. Whatever exists in me, exists emotionally. Whether or not I am able to be aware of my emotionality does not affect its existence. It is greatly to my advantage to be able to be aware that I am an emotional person, however. Otherwise, I may habitually live wrathfully, vengefully, fearfully, and so on, without realizing it, and, hence, without being able to feel how I am thereby hurting myself. For instance, entirely unsuspected as such, my facial pallor may be an expression of my habit of mind of living in despair, or constant fear; or my flush, an unrealized sign of my habit of mind of feeling constantly ashamed, or outraged; and so on and on.

Emotional "sobriety" is a matter of my feeling my emotions as my own. "Soberness" does not mean "unemotional"; it does mean: not drunk with my emotion, but able to enjoy it in a self-contained way. My driving without being able to sense my emotions as mine and only about me is a form of drunk driving. An autoist cannot well afford to live himself as an absentee autocrat, lacking an evident accessible self-starter and self-stopper. Driving a car calls for all of the presence of mind which the emotional sanity of self-realization, the height of human helpfulness, alone can provide.

My long suffering reader here cries out:

"Hold on there! Unless you want me to put this down as all stuff and nonsense, let me point out to you a few things. I always realized that my emotions related me to my fellowman, beginning with my mother and father. Now you claim that what I used to help myself with, in building up my human relationships, is a source of mental disorder for me! In fact, you claim that I keep myself immoderate, extreme, and generally uneconomical, by not seeing that all of my 'elseness' and 'otherness' is really mine, by not seeing that all of my so-called 'relatedness' is entirely my own inside living. According to you, my jealousy of my unfaithful mate would all subside and I would again be able to feel loving if I could see clearly that my mate is all and lovably only mine, and that I can love her truly only as 'unfaithful' to herself and therefore needing to cure herself of this self-cruelty! According to you, my feeling of persecution would give way to natural loving

**John MacIver, M.D., and William P. Shepard, M.D.: *Human Factors in Accidents. Ibid.*

†The Anatomy of Loneliness.

kindness, if I could see that I am living all of my own persecutor and hence could see that he can only be attacking himself by calling his own victim "not his"! You claim that what you live consciously of yourself can never be used for cancer formation, or life dissociation of any kind! Now, what I want to know is this, How does all of that super-duper selfishness differ from egomania, from megalomania? I saw a fellow once who thought he was Napoleon, and another one who thought he was the son of God, and each one was diagnosed as suffering from delusions of grandeur. Now *you* claim to be your own everything! But you'll say my despair is just the painful sign that I'm looking for outside help!"

Yes, my every emotion is lived by me, but is not about all of me. My love is all and only about love, my hate is all and only about hate, my fear all and only about itself, and so on.

Yes, living my mind in a way which works smoothly and harmoniously does necessitate accurate self-accounting. I may not confuse one part with all of myself, or the converse.

Yes, I am my own everything and feel grand about it, but I also see my "you" as your own everything, and also see that you cannot feel grand about it until you see yourself in that accurate, full, measure.

And, also, yes, my desperation is always traceable to my dogged determination to seek for help where it cannot be found, in the nowhere of not-I. My emotional hopelessness is ever a painful sign that I am not living myself in a hopeful way, that is, with the clear, sober, appreciation of my all comprehending human individuality. Otherwise, I would see that while there is life, there is hope.

To be specific, once I fail to see my fellow autoist as my own, I prepare myself thereby to suffer any and every painful feeling, without realizing that I am bringing it upon myself through this failure. I may become enraged or uncaring, fearful or reckless, accusatory or irresponsible, envious or scornful, and so on, and thus continue to hurt myself by living my enemy, or my stranger, as "not mine at all."

The efficacious treatment of each one of my emotional problems lies in my appreciation and continuous development of the extent of my self-possession and, hence, of my necessity for self-reliance. "God helps him who helps himself," is a view which encompasses the truth of the allness of individuality. This observation of self-consciousness as being the only possible ground of honest self-knowledge, the equating of self-

consciousness with divinity, is reminiscent of my St. Augustine's consciousness of his self living, of my Descartes's self-consciousness, of my Malebranche's self appreciation, and of my psychoanalyst's view that making self a conscious self is a healthful procedure. Of my fellowman I can only observe, with holy writ: "Ye are gods." After all, is there any possible feeling of certainty, apart from self-consciousness? What is not a personal problem is no problem at all. "I am speaking of, and for, myself," must be my fundamental view in my attempt to treat my traffic syndrome. The free feeling of "my living me" is the central principle of my life. Each one of my sensations and perceptions is a primary form of the activity of my personality and, as such, represents my growing individuality.

Whenever my distressing emotion fails as a signal of mine which I can use for saving myself from the risks of self anesthesia, it must appear to me to "take over," to take up my self-awareness, so that I feel myself "in a panic" of this specific emotional distress. I may then proceed to try to make the best of a disabling circumstance, to suffer the "knock" of my mental motor as signs that its cylinders are missing.

As Helen Keller observes in beginning the story of her life, it is with a kind of fear, "a superstitious hesitation," that I publish my views upon my emotional problems in my traffic living. All I can ask, and that I do ask, is that my reader consider the author of this report as his patient, as one who recognizes that he is both mentally ill and weak, hence needing to heal and strengthen his mind. Again with Helen Keller, I do feel that "the higher truths relating to everyday life" do "embarrass most people as much as the company of great men." Self-blind as I am, to the extent that I am unconscious of myself, I too exclaim:

"What if a ray of light should flash through the darkened chambers of my soul? What would happen, I ask many and many a time. Would the bow-and-string tension of life snap? Would the heart, overweighted with sudden joy, stop beating for very excess of happiness?"*

Emotion in every kind and degree is a sign of life and a precious source of vitality. Any and every emotional problem is therefore not

*Helen Keller: *The Story of My Life*. New York: Grosset and Dunlap, 1905.

truly a problem inherent in the emotion itself, but one inherent in the particularly difficult way in which the emotion, simple clear and precious in itself, is experienced. It is fully well to be able to be conscious of every human feeling, or emotion, with composure. It is not so well to be intolerant of any human feeling, or emotion, with or without composure.

Driving a car tests the extent to which I have developed my ability to live emotionally with self-composure. A precious safety measure is the insight: My driving always involves exciting emotional living. Preparedness for my own "internal combustion" helps to prevent my overwhelming myself with various strong drives necessarily associated with my traffic driving. Both intense pleasures and severe pains, such as annoyance, anger, righteous indignation, envy, rivalry, guilt, fear, distrust, embarrassment, shame and so on are dangerously distracting driving distresses. It is up to me to grow able to live any such feeling with self-control, in order to have my car under control.**

There is no worse form of illness than ill manners. A test of my readiness to live myself in a good-natured, well-mannered way is administered every time I drive my car. I am indeed fortunate when I am sufficiently rested and self-contained to live the highway statesmanship of my fellow motorist really as mine, observing my pedestrian really as mine, recognizing all of my automobile world as really mine. The easier it seems for me to live myself as if I could be transported "out of my mind," as in times of loud exasperation or quiet despair, the less able am I to concentrate on the exigencies of my real motor transportation. The height of good manners is: minding my own business. Wilbur Shaw sagely observed about the "mortal sin" of inattentive driving: "A good driver is invariably a very poor riding companion, because he always has his mind on his work not on his entertainment."†

A "self-contained person" is one who is aware that he contains all of his pleasant and painful

human feelings, one who is continent in that his emotions do not "spill over." The emotional component of my traffic living is ever great, often enormous, always contingent upon innumerable unpredictable events, and constantly a source of possible fatal interference with my driving efficiency.

As a motorist I help myself emotionally exclusively by realizing that my world, including my traffic is the creation of my own self, a production of my very own activity. With my Novalis I may say, "Why need we traverse the difficult roads through physical nature? The better and purer road lies within our own mind." Thus I may see the true expansion of my selfhood, finding my own individuality behind the veil I draw of "external world," recognizing my "externality" as my own product, as nothing but a wonderful means of mine for carrying on my individuality most happily. What living of mine I cannot identify as entirely an existence of my own is an illusion of mine, a reality of me which I cannot observe as such. When my Herbart recognized the study of mind as a legitimate self-interest he, thereby, introduced the importance of renouncing all other study. "I am my own 'ancients,' 'tradition,' 'authority,' 'history,' 'impersonal,' and any other psychologism,"—is the finding and founding of myself indispensable for my self-conscious living.

Another one of my readers resists this view:

"Doctor, when I have been indulging the habit of mind, you would say, of not even questioning the existence of an external world entirely outside of me, what harm can there be to my driving if I just go on living in the same way that some three billion of my fellowmen live. In fact, wouldn't it annoy me, so that I'd better draw over to the side of the road and stop, to be constantly owning up, as you would describe it, to all of my traffic living? Can't I live a more serene emotional life by believing (1) somebody else can help me, and (2) I can help somebody else, than by seeing that (1) my somebody else can only help himself and (2) I can only help myself?"

As I ask myself each of these questions, I see clearly that my self-reliance, sense of self-possession, self-confidence, and self-esteem, in fact, every self element of mine, benefits from my living the truth of my oneness, and that the emotional gain of an accurate self-estimate is of life-saving driving help for me. Also, the habit of mind of owning up to my living is to be attained

**John M. Dorsey, M.D., *Psychological Medicine. The Journal of the Michigan State Medical Society* (to be published).

†Also according to Shaw, the President of the Indianapolis Speedway Corporation, "In my opinion, the most courteous—or sportsmanlike—people on the road are the much maligned women drivers." See Paul W. Kearney; *How to Drive Better and Avoid Accidents*. New York: Thomas Y. Crowell Company, 1953.

gradually and simply by practice. And, lastly, my appreciation of my self-helpfulness is my very most cherished one, which I enjoy most happily in its corresponding expression in my fellowman.

Human life is nothing except the life of each separate individual human being, and it is nowhere else to be found. My *taedium vitae* is the direct outcome of ignored sources of liveliness in myself. I need naturally to see myself in every part of my world, not just in its front side or rear view mirrors, in order to clear my senses to revere my individuality. With each new model of car and expressway, for safety's sake, must go a new model of driver equipped with the virtue of how to use them: Self-insight. My tranquilizing drug may appear to "quiet my nerves," but it requires the growth of my self-consciousness to bring my serenity of spirit, stamina of soul, strength of sincerity.

After all, "traffic" is exactly what each one makes it out to be. Apart from its meaning for and in each individual, it can have no other meaning. As I live myself emotionally, so do I drive emotionally. As one of my friends keenly observed:

"Any Detroit traffic condition depends largely upon which side of the bed I get out on each morning. When I feel up to it, the 'traffic' goes along smoothly and I marvel at the few snarls and 'ham' drivers. I can even enjoy seeing how each driver expresses his individuality as best he can in his driving. On other mornings, though, nothing seems to go well in traffic, nothing! Then everybody, everyone that I see anyway, looks like a hit-and-run driver, as if he shouldn't have a driver's license. He's asleep at the wheel, hogging the road, speeding, or stalled, or something that he oughtn't be. That's just the day I shouldn't drive on,—trouble everywhere, how can I keep out of it."

Defensive Driving

To any serious observer the basic flaw in our approach to the traffic problem has been our universal misconception of the driver's license and what it means. —PAUL W. KEARNEY.

An essential qualification for every driver, which is becoming more and more appreciated as a life-saving attribute, is that of his capacity to develop *defensive driving*.* Density of traffic now requires that I grow myself as a defensive driver, if I would avoid remaining an offensive one.

Defensive driving may be loosely defined as

*See Charlotte Montgomery: *Handbook for the Woman Driver*. New York: The Vanguard Press, 1955. This author kindly prefers the term "Wide-span driving," a wording which renounces violence and introduces the high man-powered meaning: Attention!

"driving for the other fellow," but it means observing that my "other fellow" is driving for himself, that he is living his immediate necessities in terms of the way he conducts his life generally. At first sight this view, "recognizing my responsibility for taking into account my fellow driver's inexpertness," may seem beyond my understanding. How helpful it is for me to acknowledge that every bit of progress in my development has been made up against that some ominous force, the Un-understandable! To see myself with this great souled enlightened selfishness in as much of my living as possible is the finest possible discipline of my sense of value, of my feeling of worth, of my appreciation of my life itself.

There are some two million new drivers beginning each year. Nothing can possibly reach the masses of traffickers except through each individual driver. My review of automotive meanings for the preparation of this study has definitely improved me as a defensive driver. The finest physician is the one who sees he is a self-made physician; the best driver is the one who sees he is a self-made careful driver. It is the mere feeling for my life which provides me with the effective motivation for caring for my fellow driver as mine. Nothing else can. What I live consciously is what I cherish consciously.

My highway truck driver has succeeded in "making a fine name for himself" as a decent fellow citizen of the road largely through his kind defensive driving. The more my emotional life harmonizes with my sense of self-possession, the greater is my capacity to become a defensive driver. Every really new slant on my growing up more helpfully is first viewed as repugnant to my habit of mind. For instance, the view, "Diagnose and treat my traffic violator as myself," will always blind me until I feel emotionally that I really help myself with it.

In all kinds of behavior where good taste based upon self-interest does not motivate my driving etiquette, for my wide-span driving I must call upon the next best source of self-care, namely superficial politeness. When I do not, and cannot, feel emotionally my well-mannered or ill-mannered fellow motorist as mine, I may compensate helpfully for this "case of mistaken identity" within me, by shallow civility, by pretending equality.

As I invest my living attention in my fellow driver, I thereby test my ability to live myself

kindly in that particular identification. The greater my ability to tolerate kindly the inexpert driving of my fellow driver, the greater my readiness for my traffic living,—and the converse.

Quite as I tend to arrogate to myself greater mental health and strength than I really have, so particularly do I tend to consider myself a safer driver than I really am. This specific self-deception that I am more expert in traffic living than the facts warrant alone accounts for my contribution to the density of traffic. Mechanical devices unquestionably making my driving easier and safer, in every instance also may make it more difficult and dangerous, in that they greatly favor my illusion, "I am not now taking so many chances even if I am not the best of drivers." The "newest thing" in a revolver makes it no safer for Russian roulette.

What difference does it make to me if I call my fellow driver mine, if he happens to be intoxicated and drives his car in such a way that I cannot avoid a collision injuring myself severely? It makes all the difference in my being able to be kind to myself following my accident, in my escaping the narrow-minded view that two wrongs (to myself) can make a right, in my avoiding constantly torturing myself with feelings of bitterness and obsessing myself with derogatory ideas. By viewing the whole painful experience as my own I can help myself directly the most, and my intoxicated fellowman can help himself most. This self-kindness is the most economic force of all for guaranteeing my every kind of recovery, healthfully and wealthfully. With kindness, distributive justice proceeds best, amends being made as reparations, not as terrors. With kindness my healing process enjoys the most favorable course—synergic intentions, not cross-purposes.

Anterior to my traffic safety's shaky three E's (Education, Engineering, and Enforcement) is always its solid I. The deep and wide-span driving which enables me to see my mind in myself and keep myself in mind is a hidden critical factor in good driving. By concentrating upon myself as my world, I accumulate mileage on the right side of the right road leading in the right direction.

The indomitable force of the feeling of kindness is all too rarely appreciated, all on account of the fact that kindness is all too rarely recognized for what it always is: Self-kindness. All unkindness

likewise is self-unkindness, and motoring unkindness may be suicidal. To the three R's for safety's sake, now is being added a fourth: Riding. A basic text for driving school, "Watch everything, far and near,"* highlights the necessity for the protective use of my mind's eye also.

I, including all of my fellowmen, have grown too rapidly as a motorist to be able to stabilize myself sanely on that level. Jokes have been made over the fact that our national flower is the golden rod even though ours is a car-nation. My young American male now regards his readiness to drive an automobile as a kind of maturity test. His steering and maneuvering a car have something of the significance for him which aiming and deftness with a gun had for his pioneer ancestors. Some grisly traffic humor proposes that the driver put a notch on his steering wheel for every pedestrian he runs down. Much car advertising appeal now is essentially that which attracts the emotions of the precious child in my nature. It appears to be leveled at that wonderful stage of my development which was accurately high and mighty, but which did not include my equally precious fellow driver in my comprehension of myself.

Perhaps the most misleading view of my automobile living, corrected somewhat in my convertible with the top down, is the illusion that it is a private life which does not include my public welfare. The illusion that I am "inside looking out" may take over to such an extent that my realization of living my "outside" within me may be correspondingly dim. *The key to a happy full life is to be able to see clearly all that is in that life.* I cannot consider myself with anything like a full view without having a happy sense of self-fulfillment.

Traffic Sanity

"Now in building of chaises, I tell you what, There is always *somewhere* a weakest spot."—HOLMES

The public health significance of mind consciousness, of living my self consciously, is nowhere illustrated more clearly than in driving. Thus, it is sometimes strikingly evident that, as a motorist, I hide myself behind a feeling of anonymity. This lack of a sense, or feeling, of personal identity is what characterizes every bit of my "wild" behavior in every kind of mob action.

*Frank Williams: *How to Drive and Stay Alive*. Greenlawn, New York: Harian Publications, 1954.

Hence, having my traffic officer ask for my name and address accomplishes most for bringing myself to my senses. It has occurred to me that the simple method of having my name conspicuously appearing on the outside of my automobile would greatly favor my peaceful driving. A sane driver is a self-oriented one.

On the other hand, I can sense my need to identify myself with my automobile, even to the extent of driving it as if it were a continuation of my own body. It does seem natural to expect and demand that my driver identity, as an ego-mobile, lend itself to much greater use in my seeing to it that my ipsomobile† is in good driving condition, and that I, including my fellow driver and fellow pedestrian, escape harm. Vannevar Bush said it well, "The doctor, above all professional men, needs to be a full man." Nowhere is this qualification more applicable than to the doctor of traffic complaints. Certainly every sufficiently experienced physician has observed the personal resemblance of complaint and complainer, as of accused and accuser.

No matter whether I express my emotional disorders in speeding, lane-straddling, disregarding traffic signals, or losing my basic sense of selfness in concentrating upon "the other fellow's" poor driving, my fundamental difficulty is the same one, namely, my attention is not vigilantly devoted to my driving. Thus my chronic or acute, mild or severe, emotional panics disable me for this all-important purposeful focusing of myself as a driver.

My incontinent emotions may disable me as a driver in two chief ways: (1) I may be so greatly "upset" with inordinate anger, grief, jealousy, or any other extreme feeling, that I disqualify myself as a safe driver; or (2) I may live my emotional qualities under such disregard, so "feelinglessly," that I drive carelessly or uncaringly. It is particularly this forged "calmness" covering up my humane feelings, which can account for my reckless driving. As a cold, dispassionate, disinterested, impersonal driver, I lack humanizing kindness and a tender sense of identity with my fellow driver.

Each and every emotional problem, in or out of a car, resolves itself into a problem of my self-rejection, necessarily accompanied by a constriction of my self-esteem. Once I see nothing

but my own identity in my living, I immediately recover my mental equilibrium. Moreover, until I do succeed in seeing wherein I am living my own fellowman, my distressing feelings signalize that human failing.

Driving offers innumerable opportunities for autohypnosis besides all degrees of actually falling asleep at the wheel. Easiest of all, I can lull myself into a sense of false security, simply by concentrating on such shiny truths as, "Nothing harmful has happened so far," "The fears I have when I 'imagine' traffic, are the worst," and so on. "On parade" I may enjoy my deepest and most satisfying illusion of being seen and heard from. The swiftly changing scenery can distract my attention from the dangerous operation for which I am responsible. Driving is a full-time risky assignment, and one which is not safely combined with other seemingly uncomplicated activities, not to mention courting, daydreaming, or drinking.

As more and more of my fellow citizens expect to be able to secure an automobile license, I certainly expect to find a much greater number of inexperienced drivers. A similar kind of situation is occurring in my school living. As more and more citizens have demanded education rights, an illusion has been created to the effect that my educator appears to be lowering his educational standards, such not at all being the case. As far as respecting the dignity of the individual citizen is concerned, health is to be gained by having him educate himself as much as he can. If I take the position that it is good citizenship for me to have only those of my fellow citizens educate themselves who are capable of attaining highest educational standards, I find myself in an untenable position. Some similar American consideration of the most careful kind may be given to the inexperienced driver. The true source of American vitality is American consciousness of the dignity and sufficientness of the individual man. "Team play" in which every player sees his team as his own—that is uniquely the American way. There is no emotional traffic tie-up which this clear mindedness cannot clear up.

Every person's traffic jam, or clearance, exists in him—he cannot exist in it. The traffic was made for man, not man for the traffic, little appreciated as this realistic view may be. *The degree to which my traffic becomes appreciated as mine is the only safe criterion for my measuring the achievement of humane traffic management.*

†This name was once proposed as the official one for "the horseless carriage."

I cannot make traffic safe for somebody else, or make somebody else a safe driver. Each one of us must do that for himself.

Perhaps this constant concentration upon the inclusiveness and exclusiveness of oneness, of individuality, is not clearly comprehensible for one of its readers. I am most thankful of all (to myself) for the awakening of my conscious interest in the arrest of my development inherent in the view: "Whatever seems incomprehensible to me is not a source of helpfulness for me and I can safely assume that it, itself, cannot be understood, and that I need not regard myself as unclear, unlightened or undeveloped on its account." I am grateful to myself here and now for my ability to scrutinize my traffic views with less obscurantism, less occultism, less superstition, than I must feel if I do not see them entirely and only as my own.

The designation of a person as "a big wheel" is more humorous than humane. Man's unconscious identification with his car can be an instance of his "losing his mind"—not a conscious finding of his mind in his very own creations. Thus he may allude to himself with or without insight as "clutching up," needing a "tuning up," a "brake job," "new spark plugs," or "a complete overhauling." All of the machinery of his world, all of his universe exists in each man. Take from any one of his world interests the life which he gives to it and what remains of it? Nothing*

I can hear one of my readers exclaim,

"That's going too far! For instance, how may a driver's school profit from this comprehensive view of self-activity? What good does it do the pupil to pay more attention to the purely subjective, human, nature of all of his automotive living? Will not 'all people agree,' does not plain 'common sense' show, that every student driver needs to forget about himself and concentrate on his driving lesson? Is it not an ordinary observation which any student can make for himself, as you seem to like to say it, that he is surrounded by

***"Joe does not know that he is the victim of a mechanized and materialistic culture. His environment from the beginning has been so largely made up of gadgets and machines that without their benign presence Joe feels lost, as if he has been dropped suddenly into the middle of an Alley-Oop type of primitivism. Joe's life began with a deception. On his third day, he began sucking on a rubber or plastic nipple instead of at his mother's breast. He was brought up on a formula with certain additives to insure his motor against carbon deposits."—E. C. Coleman, I. Clark Davis, and E. G. Lentz: *Shall Joe's Car Go to College?* *American Association of University Professors* (Summer Issue): 43: No. 2, June, 1957.

his environment, not that his environment is surrounded by him? Does 'Look Where You're Growing!' strike you as a better road sign than 'Look Where You're Going?' Is it your idea of safe driving technique to imagine your pedestrian, or fellow driver, as nothing but a sense perception, or an insight, of yours? Are you really 'so far gone' on your subject that you think psychology can correct traffic wrongs? How much of a deterrent is it to a careless driver to be mindful that he is only hurting himself by his carelessness? Oh, I could go on and on shooting holes in your individuality theory! When you see me next time on the highway, please see me as real and my car as real, not just perceptions of yours! Do you think for one minute that my seeing the road sign as my road sign, the ignition as my ignition, the steering wheel as my steering wheel, the accelerator as my accelerator, the brake as my brake, the traffic officer as my traffic officer, the traffic ordinances as my traffic ordinances, will improve my driving! Doctor, please, were you retarded in school, or do you just enjoy writing startling inanities? Put on your headlights, you're driving in the dark."

Treatment

"The man who knows not that he knows not aught
He is a fool, no light shall ever reach him.
Who knows he knows not and would fain be taught
He is but simple, take thou him and teach him.
But whoso knowing, knows not that he knows,
He is asleep, go thou to him and wake him.
The truly wise both knows and knows he knows,
Cleave thou to him, and never more forsake him."

From the Arabic

Who is a poor driver? One answer is an easy one for me. Some other impulsive, hot-headed, stupid motorist! However, a comprehensive view of the traffic problem in my world will not allow me to drive far in that kind of fog. To the extent that I do so, I top the myth of the headless horseman with the stark reality of the headless driver. What is the sovereign remedy, the panacea, the specific treatment for "the inexpert driver?" I know of no way of raising the level of automobile driving in my world except the sure one of making a better driver of myself. Nevertheless, it often seems practical to me to try to get everyone else in my world to drive more kindly (expertly). In fact this illusion of "making somebody else a better driver" is so tempting that, at times, it seems I might find it both "face saving" and comforting to develop this writing as based upon it. However, in the long run the medical principle of self-help shows up this illusion as being too unhealthy for indulgence. Discovering for myself that my fellow driver is only as dense or as clear as I am, finding out for myself that my expecting more carefulness than is

immediately possible, can only increase my driving hazards,—such open-eyed insight has contributed immeasurably to my safer and saner automobile living.

Automobile accident prevention confronts every American citizen with one of his most severe tests of his ability to respect the dignity and comprehensiveness of his human individuality. The January 26, 1957 issue of the *Journal of the American Medical Association* is devoted to original articles bearing upon traffic safety. Everyone of these articles stresses the importance of studying each participant in a traffic problem as a unique individual. Fully esteemed human individuality is the health basis for all proper accident prevention programming.** It is becoming increasingly evident that an application for an automobile license requires for its completion a thorough medical examination, and that continued driving requires continuing, follow-up, medical clearance. For instance, as an individual who is "accident prone," I must deprive myself of driving privileges for my own good, pending my study and treatment and cure of myself as an accident repeater.

My need to be able to suffer myself "through thick and thin," to endure the growth of my hardiness as well as heartiness, accounts for the growing pains attending my progressive development as a world citizen. As long as my capacity for feeling hurt is applied toward my culturing myself in the ways of tolerance and magnanimity, it is all to the good. However, it is also possible for me to develop the habit of hurting myself less profitably, indulging a need for vindictive punishment, "asking for it," "leading with my solar plexis." Thus, "a glutton for punishment," I may be really anxious to have my accident for

the week, or month, and get it over with. A nonshatter windshield is a great help, but it may not keep me from "flying to pieces." A safety belt is a wise precaution, but it may not help me to "hang on to myself."

Automotive inventions certainly help to make driving easier. But it is a grievous error to consider driving of any kind to be easy. My car is a truly marvelous instrument but, like every other means of expressing power, its use as a benefaction can be only the issue of the wisdom and care with which it is employed. When I attempt to account for there being as few accidents as actually occur, the best solution that I can come up with is that this outcome is itself accidental. This view may not be seen entirely as a gloomy one if the meaning of the word accident itself is carefully explored. "Accident" means: the forces necessitating the event are not sufficiently taken into account. It is a happy view which sees many unconscious forces not taken into account which necessarily reduce the number of collisions of every kind. As Kearney firmly observes, nobody will ever know how many "perfect driving records" have been made on the law of averages.

Is there any possible way of holding human life dear, not "cheap," except by revering human individuality? Does the soporific habit of mind addicting nearly everyone, "I live in my world, my world does not live in me," necessarily make for careless and reckless driving? Does all "traffic management" unrecognizable as self-development and self-control, tend to defeat its purpose: the preservation of human life? Does "automotive industry" have any significance whatsoever except insofar as each given individual contributes his own vitality to making it a meaningful concept? If I take my living away from "automobile," or from "traffic," what remains for me? Is it not thus with every single one of my fellowmen? Does this insight carry much weight in my world? Until this true dignity of man is clearly the motivation for safe driving, can there be wholehearted devotion to traffic safety?

Oh, yes, I can pass traffic ordinances in increasing numbers, as well as increasing traffic fines correspondingly; in other words, symptomatic treatment in the form of law enforcement helps. Even if present driving license requirements were enforced, it would help particularly in presenting the extreme necessity for driving proficiency in the right light. However, north, south, east, and

***"It is submitted that the prevention of motor-vehicle accident falls within the scope of preventive medicine because of the epidemic nature of accidental deaths and injuries and because of the outstanding role of host factors in causing accidents. The physician, because of his background in the biological sciences, has an unusual opportunity to understand the human causes of accidents and to combine treatment with education and safety." Ross A. McFarland, Ph.D.: *Psychological and Psychiatric Aspects of Highway Safety. Journal of the A.M.A.*, January 26, 1957.

Also see, Murray E. Gibbens, William V. Smith, M.D., Ward B. Studt, M.D.: *The Doctor and the Automobile Accident. Journal of the A.M.A.*, January 26, 1957. This article incorporates sixteen driving rules entitled the "Good Driver's Code." Every one of these rules embodies an appreciation of the healthfulness of self-esteem, and the healthlessness of self-disesteem. As the medical authors indicate, it would be well to have a code such as this adopted by state licensing boards.

west of the traffic officer, the law of the six cylinder, or eight cylinder prevails, where government is not lived consciously as self-government.† Thoreau saw this truth brightly, "That government is best which governs not at all," and, "For government is an expedient by which men would fain succeed in letting one another alone and, as has been said, when it is most expedient, the governed are most let alone by it." The story goes that Sergeant Alvin York accounted for his single-handed capture of many enemy soldiers by, "I surrounded them."

Proceedings involving traffic offenses create unique problems of legislation and of law enforcement with regard to the issue of human individuality. Of local traffic courts, Alfred T. Vanderbilt recorded a profound observation:

"Traffic violations present peculiar problems which emphasize the shortcomings of many of these local courts. People whose sense of respect for law and order would preclude their attempting to tamper with the administration of justice in other courts, do not hesitate to do so in evading punishment for traffic offenses. While outstanding records have been made in traffic courts here and there, such courts unfortunately are the exception and not the rule. Yet because most people will never appear in any other court, there is no other place where they can learn the true meaning of justice, of respect for law, and their significance for good citizenship. The field is one which cannot be neglected without grave risk to the future of the body politic."*

Necessary to say, all of my humanity, mankind, is entirely mine! The general traffic safety of mankind is only, and nothing but, a matter of each separate individual's safety. The driver with the most insight is the sanest, hence safest. May my insight show me that my intention to improve upon myself as a driver includes my living myself in such a way that my fellow driver may similarly improve himself. Seeing all sources of helpfulness as useful in "traffic management," is no exception to seeing my traffic control as an extension of my self-control.

†"A psychiatric examination in the Detroit Traffic Clinic was ordered for a commercial driver who had been ticketed on over two hundred occasions. His operator's license had been suspended, he had been fined, placed on probation, but he continued to drive without a license and was arrested."—Alan Canty: *Problem Drivers and Criminal Offenders: A Diagnostic Comparison*. Reprinted from *Canadian Services Medical Journal*, 12:136-143, February, 1956.

*George Warren: *Traffic Courts*. (Judicial Administration Series.) Boston: Little, Brown and Company, 1942.

For seeing my automobile as the wheel of fortune, which it truly is, I, too, may well have it speak up for itself as follows:

I'm just a motor car—a ship of the highway—and you're my captain.

Behind my steering wheel you're the lord and master of a miracle.

You can make me take the kids to school;

You can drive me down the sunny road toward the country;

With me you can carry your goods from the market place . . . you can rush the sick to be healed . . . you can go in minutes to places otherwise hours away.

You can do magic!

Yet, in the blink of an eye, in one tick of your watch, I can turn deadly killer!

I can snuff out the life of a boy or girl still full of life . . . I can twist a smile into tears . . . I can wreck and cripple and destroy.

I can deal out death like the plague!

And I'm no respecter of persons . . . a child, a grandmother, or even you, my friend . . . it's all the same to me.

I'm sensitive. I respond instantly to the commands you give me.

If you guide me with steady hands and feet, clear eyes, and an alert brain—all responding to good attitudes, trained habits, and cool judgment—then I'm your friend.

But if I'm guided with unsteady hands and feet, dull eyes, or a sluggish brain . . . if I'm directed by un-sportsmanlike attitudes, bad habits, or poor judgment . . . then I'm your enemy . . . a menace to the life, the happiness, the future of every person riding, walking, or playing.

I was made for pleasure and usefulness.

Keep me that way.

I'm in your hands.

I'm just a motor car, and you're my captain.

Behind my steering wheel you're the lord and master of a miracle or . . . a tragedy.

It's up to you!*

In order to feel deeply, grow emotional, about my traffic problem, I must observe it as personally mine. I can have no one else tell me what I only can find out, namely, that it's up to me to care kindly for myself, in my traffic as in any other living. I may be able to observe, however, that my neighbor is living himself with increasing gentleness and decent consideration in the way he drives his car—and such a self-observation of mine can further my stopping, looking, and listening. In this growth of my sane emotional traffic living there is no suggestion of that totally im-

**Man and the Motor Car. Fifth edition. The Center for Safety Education New York University. New York: Prentice-Hall, Inc.

possible mental feat of "learning by example." I can learn by my living only. Each of my emotions which I can see has only to do with my own living, is soberly lived. Every other emotion is intoxicating me, even though it be a kind of intoxication which my fellow physician's† most helpful Drunkometer cannot measure. My properly dreaded police classifications HBD (Had Been Drinking) and DWI (Driving While Intoxicated) may well be extended to cover my trying to drive and be inebriated emotionally at the same time.

After all of this one-way traffic of words, again I seem to hear my patient reader remonstrate:

"That this product of human activity called motor transportation is a psychological, hence human individual, one; that every meaning of traffic exists only in each separate mind; that individual independence is the producer of all that stands for civil and uncivil whole, hence the producer of the idea that whole humanity is nothing but a collection of single minds; that it is only his consciousness of his greater self, not his consciousness of his dependence upon a so-called 'external world' which he could not have produced, which makes man see his world as his own; that 'family,' 'state,' 'religion,' and all such personifications are products of man which grow only with his growth, and that he is not educated or in any way influenced by any of them as 'externals'; that self-created, and so consciously realized, sense perception (the same as insight) sees the truth; that whatever is wrong in a human being requires his mind to fix it; that any and every matter of any and every meaning presupposes one mind as its sole and whole creator; and that devotion to this kind of self-orientation is necessary in order that self-esteem (the specific feeling that heals and strengthens and satisfies), may be fully measured and fully dispensed, —all of that, I say, I can go along with, if in no other sense than as wild claims that you make for the study and practice of yourself in medicine with self-consciousness. What I would like to be able to see clearly is, How in the world of Dorsey, do you intend, or even expect, to have your seventy million worlds,* and that number is just your fellow American drivers, benefit from these technical introversions which you say yourself you have worked thirty-two years to cultivate? You can see for yourself what is needed *now*, not that it won't be needed thirty-two years from now, maybe more. Come down from your ivory tower and try crossing the Edsel Ford Expressway at the rush hour on those psychological feet of yours!"

†Dr. R. N. Harger, Professor of Biochemistry and Toxicology, Indiana School of Medicine.

*Agnes A. Sharp, Ph.D.: Forty Million Worlds. Public Safety, p. 16, June, 1939.

To all of which, and the like, I give careful heed. Once more may I point out that I am in favor of every way in which anyone in my world is helping himself, and here, specifically, solving his every kind of traffic problem. My view of helpfulness is in no way subtractive, only additive. From personal experience I find that I can and do help myself, whether I do it self-consciously or not. When I do it self-consciously I help myself more than otherwise, that is all.

May my discontented reader have the last words:

"Oh, yeah! Tell it to the judge! But according to you, all living is self-activity, so have your judge have some external observations on traffic by means of introspection!

"Or better still, next time he has me up for a traffic violation make sure that he sees me as *his* traffic violator, especially when he slaps on that fine.

"According to you, Doctor, there will always be a lot of labor-management unkindness, until the laborer can see his manager as his very own, and the manager can see his laborer as his very own. Are you expecting the millenium this year? Sure, if every employe of Ford Motor Company could live his Company, each of its personnel, as his own, he would thereby see himself as high above and far beyond attacking himself and calling his injured selfness 'the boss,' or 'somebody else.' I imagine that you wrote these minutes of yours in the quiet peace of your study, far from the noisy annoyances of the assembly line. There are a lot of bugs in your magnanimous 'broad selfishness' theory that need ironing out. If you don't believe me, try them out on a traffic violator who just came from a dressing down by his wife, is on his tardy way to an irate foreman, and is now confronting an indignant traffic officer!

"But seriously, Doctor, you remind me of the ancients in the way you would solve the traffic problem. They denied entirely the existence of any motion whatsoever, observing, 'A thing cannot move to where it is, since it is there already; and of course cannot move to where it is not; hence it cannot move at all!' Come to think of it, for me always and everywhere are ever the same, now and here! I am going to stop all of this or first thing I know I'll be saying, 'Maybe you've got something there. Maybe the only real development of driving-school is each pupil's heart culture.' I am interested in your claims for conscious self-possession and self-reliance though, and, as Kettering once said before the Automobile Old Timers, 'The desire to know is infinitely more important than knowing how.' If I am unconsciously arresting my own development, I want to wake up to that rut I'm in."

Function of an Amputee Clinic

By Frederic B. House, M.D.

Ann Arbor Michigan

IN PLANNING for rehabilitation at St. Joseph Mercy Hospital, we try to keep our eyes on the objective and allow ourselves to be somewhat flexible in devising plans for reaching the objective. In the case of amputees, the objective is clearly the rehabilitation of the individual patient. To accomplish this, a team is required since no single doctor or social agency can accomplish this task unaided. We have brought such a team together and we call it a Lower Limb Amputee Clinic. It is important to note that the team may differ from case to case as the individual patient's needs are found. Furthermore, it may differ depending on the role the surgeon cares to play. He is encouraged to stay with the patient and prescribe for him from beginning to end. He may, however, transfer responsibility as soon as the leg has been removed. If the surgeon does not stay with the case, medical responsibility is transferred to the physiatrist.

The clinic assembles once each week. We count among our members the surgeon, physiatrist, physical therapist and social service from our own hospital. From the outside we bring in the representative from the Office of Vocational Rehabilitation and the prosthetist. When needed, we can draw from any of the medical specialists in the hospital to assist with particular problems that may arise in a specific case.

The functions that the clinic performs can be described under six headings:

(1) Presentation of the case by the surgeon; (2) physical therapy; (3) evaluation and planning; (4) preparing the prosthesis; (5) gait training and (6) vocational adjustment.

Presentation of the case by the surgeons:—Ideally, the surgeon will present to the clinic a patient whose limb has been removed for just cause, at an optimum level, in which proper muscle attachments have taken place, skin healed and contractures eliminated. The time necessary for these things to take place is frequently unpredictable

and a varying amount of assistance from others in the clinic may be brought to bear on the problem during the postoperative period. Because of this, we encourage bringing the case to the clinic soon after amputation has been done.

Physical therapy:—At the direction of the surgeon or the physiatrist, physical therapy may be used with benefit in the following ways: as means of general conditioning by the use of massage and exercises for the uninvolved limbs, for teaching crutch walking (a prerequisite to proper use of a prosthesis, since it demonstrates the patient's will to learn and ability to gain balance), for preventing contractures and building muscle strength necessary to the proper use of a prosthesis, for providing such agents as whirlpool, ultra violet light, ultra sound, bandaging and others for the proper healing and shrinking of the stump. The therapist has another role frequently forgotten—intelligently to encourage the patient in working toward his objective. She may make the difference between success and failure in this one activity alone.

Evaluation and planning:—With the information so far accumulated and the patient at hand, the clinic evaluates the case to determine three things. First, what degree of rehabilitation can be expected, second, how this can be accomplished, and, third, who will pay the bill.

It is well understood that no prosthesis will restore to an amputee the same degree of function he would have had with the intact leg. One may call the maximum possible degree of rehabilitation 80 per cent of normal and call 20 per cent that degree of proficiency required to permit the amputee not only to walk but also improve his ability to perform the activities of daily living over one confined to a wheel chair. With this scale in mind, the clinic can estimate the point in between those limits that a particular individual patient may expect to reach. Although, as a trick, a patient might be able to walk a few steps on a prosthesis, if he is not going to reach

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the twenty per cent level or above, he would probably not use the prosthesis and a great deal of expense would be wasted if one was made for him. Therefore, if such is the finding of the clinic, no

ancient zeal and a few modern tools he seems to almost duplicate the lost limb. However, as we have said, one doesn't expect 100 per cent functional recovery. The leg is made to the doctor's



Fig. 1. Above the knee amputee, midway in his gait training. The leg is still in the rough and will not be finished until a perfect fit has been obtained.



Fig. 2. Below the knee amputee, able to stand alone after many months of disabling vascular disease in the left leg and foot. He will return to gainful employment.

prosthesis would be recommended and the patient would be instructed in the use of a wheel chair. If the clinic can see that a degree of proficiency could be obtained to allow the patient to do more than care for the activities of daily living but also allow him to be gainfully employed, then certain opportunities are available to him through the Office of Vocational Rehabilitation, including money for medical care, prosthesis and vocational adjustment.

The problem of cost must be fairly faced. In cases which are not of interest to the Office of Vocational Rehabilitation, other means of financing must be found. Social service may help find ways. The patient himself, with the help of his family, may be able to pay the bills. It can always be said that if the outlook for rehabilitation is over the 20 per cent level the care of the patient in the future will be minimized by the use of a prosthesis, provided proper training and fitting are done.

Preparing the prosthesis:—The prosthetist can do remarkable things with a block of wood. With

prescription for a patient who the clinic thinks will learn to use it. All the individuality of the patient's problem is built into the prosthesis. Many steps go into the production of a prosthesis which we will not discuss here. However, it can be said that with the clinic approach to the amputee problem the patient does not obtain a finished limb until he can walk on it and it fits well.

Gait training:—This process takes several weeks and is carried out by the physical therapist. The patient is required to come to the physical therapy department at frequent intervals. He is trained with the leg in the rough, using it only a few hours each week at first. In the intervals at home he continues the care of the stump and especially his exercise program mentioned at the beginning of this discussion. He is finally allowed to take the rough leg home for added practice when he is able to wear it with comfort for over an hour at a time.

Vocational adjustment:—The ideal result of our efforts is a worker back on the job. Many

opportunities exist for the proper candidate through the services of the Office of Vocational Rehabilitation. If the candidate is not able to learn to contribute to his own financial support, then social service and his family must help him make the adjustment to living without gainful employment.

Case Reports

Case 1.—This man had the onset of vascular disease many years ago. On October 3, 1956, he underwent an above the knee amputation of the left leg. Since our clinic was not functioning at that time, he was referred to a limbmaker who measured him for a leg. We saw him first on January 8, when the stump was well healed, but the patient was completely frustrated by difficulties in getting his leg and instructions in its use. The clinic evaluation showed an expected 40 to 60 per cent functional recovery according to our scale. The rough leg already made was obtained from the prosthetist. It was no trouble getting the patient to come in for training three to five times a week even though he had to drive from his home sixty miles away. On February 1, he was walking unaided for short periods. On February 12 he was allowed to take the leg home for use a few hours each day. On February 26, the leg was sent in for finishing. He was seen again March 12, the limb was checked out and follow-up arrangements were made.

Case 2. (Fig. 2).—This man is very happy with his prosthesis and the prospect of walking again. His first operation was a left lumbar sympathectomy on July 9, 1956. Resection of a popliteal aneurysm was done on July 18, at which time occlusion of the distal popliteal artery was demonstrated. After a period of some improvement he came in for below the knee amputation, which was done on October 29, 1956. He was seen by the clinic on November 13 and started on physical therapy for the stump and for crutch walking. In the evaluation we could foresee employment and, therefore, his case has been carried by the Office of Vocational Rehabilitation. The leg was fitted on January 8. Adjustments have been made during the period of gait training. He took his rough leg home on February 12. On February 26, the leg was sent in for finishing, and it was checked out on March 12. Gait training will be continued as needed.

In summary, then, the function of an amputee clinic is to provide the services necessary for the rehabilitation of the amputee. This requires the use of a team which can be made up from agencies already existing in communities where hospital facilities are available. Furthermore, this team can function so as not to disturb the valuable patient-doctor relationships found in open staff community hospitals.

WHIPLASH INJURIES

(Continued from Page 1146)

Physical examination, on admission, showed limited ability to open or close the mouth (related to injections) but was otherwise negative. X-rays of the cervical spine showed marginal spurring of the vertebral bodies with narrowing of the intervertebral spaces at C 4-5, C 5-6, and C 6-7, with a reversal of the normal curve at C 4 level.

On February 26, 1957, a cervical laminectomy was performed and calcified spurs were removed at C 4-5 and C 5-6 on the left. The postoperative course was uneventful and she was discharged free of pain, but carried a mild weakness of the deltoid muscle on the left. She has remained free of pain and the strength of the deltoid muscle has improved.

Conclusion

The entire subject of trauma to the cervical spine and particularly that of persistent and late symptoms, requires cautious and detailed investigation before any conclusions or standardized method of treatment can be established. It is

imperative that the subject be investigated, for we know of no disorder that tests one's clinical judgment more severely than that of deciding which of a patient's symptoms results from structural changes or nerve pathways, and which result from functional disorders, constitutional or acquired. The ability of a physician to judge correctly these factors from the onset of symptoms until rehabilitation is complete will determine (as Alex Aitken has stated) the number whose records are closed with the sum of money they spend and the disability which they keep.

Summary

Attention has been called to certain unusual features of the anatomy and physiology of the cervical spine believed to account for certain of the delayed and prolonged symptoms that arise after cervical trauma.

Asian Influenza

A Review of Available Information

By Michigan Department of Health
Lansing, Michigan

INFLUENZA was reported as being epidemic in Hong Kong during the first week of April, 1957. It apparently had its origin on the China mainland some time previously. The attack rate in Hong Kong was estimated at 15 to 20 per cent. The epidemic there subsided in mid-May. Virus studies showed it to be due to a Type A influenza of a strain not previously identified. Since its discovery in Hong Kong, this strain has spread to the various continents of the world. Travelers and ships from the Far East have brought the strain to the United States. Confirmed cases of the disease have now been found in a number of states with particular prevalence in relation to points of entry from the Orient.

The important factors in the Far East outbreaks have been poverty and crowding. Climatic and geographic factors do not seem to be operative. The incidence in the United States has been greatest where groups of young people from various places have come together with cases or contacts of the disease, as in barracks, on shipboard, in dormitories, and in camps. While cases and contacts of cases have now been widely spread in the United States for several months, no epidemics have been reported in the general population.

Although the Asian strain of influenza is highly contagious, and spreads rapidly, the disease itself has been mild, recovery has been quick and complications rare. Younger people seem to be involved much more than older people. This could indicate some previous experience with the particular strain or some immune factor present in the older age group which is not present in the younger.

The disease has been usually characterized in the United States by sudden onset, high fever, prostration, chills or chilling, sweating, frontal headache, general malaise, muscle pains, some cough, and frequently a sore throat. Nausea, vomiting, epistaxis, and abdominal pain have been infrequent. Diarrhea has been rare, as has been neck stiffness.

The physical findings have ordinarily not been marked. Dull injection of the pharynx may be present. About half the cases have shown nontender swelling of the cervical and submaxillary lymph nodes. In rare instances, rales are heard in the chest. X-ray of the chest may show increased bronchial markings.

While blood counts have commonly been normal with a normal differential; although in some instances moderate increase in the total white count has been noted with some polymorphonuclear predominance.

Prompt recovery in twenty-four to seventy-two hours is usual. Treatment to give relief from pain, rest and ample fluids is ordinarily sufficient. Neither sulfa drugs nor antibiotics are effective against the influenza virus, but may be effective should complications, which have been infrequent, occur.

Since a number of conditions may simulate influenza, it seems desirable to have some sampling of local outbreaks to determine the presence or absence of the Asian strain. Laboratory determination of the disease is made from throat washings and paired (acute and convalescent) blood specimens.

Throat washings to be of diagnostic value should be obtained during the first three days of illness, and while the patient is still febrile. Throat washings are obtained by having the patient gargle repeatedly with 10 to 15 cc. of plain bacteriological broth, or boiled skimmed milk. Saline solutions should not be used for this purpose. It may be helpful to have the patient cough, thereby bringing infected material from the trachea into the pharynx before gargling. Washings should be transferred to a closed tube for transportation to the laboratory. If a delay of a few hours is necessary, the fluid should be kept chilled at refrigerator temperatures. Specimens should be iced with ordinary ice for transfer to the laboratory. Unless the specimen can be tightly sealed, dry ice should not be used. If a longer period of storage is unavoidable, the washing should be frozen and

Prepared August, 1957.

(Continued on Page 1164)

Detroit Surgical Association

MEETINGS OF MARCH 25 AND APRIL 22, 1957

Meeting of March 25, 1957

CANCER OF THE STOMACH

By CAMERON MORRISON, R. LEHMAN,
A. RUTNER, and G. S. WILSON

An evaluation of 637 cases of cancer of the stomach was made over a ten-year period at the Detroit Receiving, the Dearborn Veterans and the Grace Hospitals. It was found that the absolute survival rate was 9 per cent, with a 21 per cent five-year survival of those resected for cure. The survival rate was the highest at the Veterans Hospital, lowest at the City Hospital, with the private institution occupying an intermediate position. This study showed that the differences in survival depends upon the condition of the patient and the extent of the disease rather than the variation in technique and ability.

Meeting of April 22, 1957

REGIONAL ENTERITIS: TREATMENT AND FOLLOW-UP ON 100 CASES

By SOLOMON G. MEYERS, M.D., PAUL E. RUBLE, M.D., and L. BYRON ASHLEY, M.D.

The prognosis was somewhat better in 100 cases of regional enteritis seen at a large private hospital than that reported from the large centers where the more seriously ill patients gravitate. The diagnosis in this group was established by tissue study in 64 per cent and by gross inspection at laparotomy in an additional 21 per cent.

Some of the patients presented with fever of undetermined origin, sprue syndrome, infantilism, and obstruction due to foreign body. Four patients had gross bowel hemorrhage. Six developed ulcerative colitis. Two patients developed cirrhosis six and eight years after ileitis was diagnosed.

A study of the follow-up data on 89 per cent of these patients revealed that only 20 per cent of the group had spontaneous or medical improvement and the remainder required surgical treatment. Surgery is indicated in intestinal obstruction, fistula formation, and intractable disease. The operation preferred in this area is resection of the disease rather than short-circuiting with transection.

Follow-up data is available in fifty-nine of the sixty-two resected cases. Arrest of the disease or long periods of palliation occurred in 81 per cent of these. Eleven cases or 19 per cent had recurrence. Of the eleven cases with poor surgical results, seven had subsequent resections with good

results in about half the cases. There was no operative mortality in the resected group. Thus, the surgical treatment of regional enteritis deserves a more optimistic prognosis than is generally reported from the large centers with a 40 to 60 per cent recurrence.

EXPERIENCES WITH SURGICAL CORRECTION OF VENTRICULAR SEPTAL DEFECTS UTILIZING CARDIAC ARREST INDUCED BY ACETYLCHOLINE

By THOMAS GAHAGAN, M.D., CHARLES SERGEANT, M.D., and C. R. LAM, M.D.

From the Division of Thoracic Surgery, Henry Ford Hospital, Detroit, Michigan

Fifty-one patients having interventricular septal defect have been operated upon with the use of the DeWall-Lillehei type of pump-oxygenator with the adjunct of cardiac arrest induced by injection of acetylcholine. This allows the heart to be completely isolated, with the systemic circulation maintained by the pump oxygenator, and the pulmonary and coronary circuits completely inactive. This allows the heart to be entered and the defect closed in a field which is quiet and free of blood.

Three situations have been encountered in which the ideal intracardiac exposure may be compromised. The presence of an unrecognized patent ductus arteriosus allows blood from the arterial side of the pump to enter the lungs, resulting in blood loss from the pumping system and bleeding into the heart via the pulmonary veins. An unrecognized left superior vena cava (persistent left common cardinal vein) allows leakage of pump blood into the right side of the heart via the coronary sinus, also resulting in blood loss and loss of exposure of the defect. The third situation is frequently encountered, in which the septal leaflet of the tricuspid valve covers the defect, as a curtain covers a window.

We have dealt with these situations in the following manner. Prior to starting the pump, a test is made for the presence of the ductus by proximal occlusion of the pulmonary artery. If a thrill persists distally, the ductus is patent and must be divided before the pump run. A search is made for the left superior vena cava. If present, it must be occluded during the perfusion by snaring it intrapericardially. When the septal leaflet of the tricuspid valve hides the defect, the chordae tendineae of the valve are severed and the leaflet is retracted upward to expose the defect. After closing the defect, the divided chordae are repaired.

The total mortality rate in the series is 34 per cent. Most of the fatalities have occurred in the group of desperately ill infants under the age of two years. In twenty-one operations performed on children three years of age or older, only one patient has been lost, a mortality rate of 4.8 per cent.

DUPUYTREN'S CONTRACTURE WITH SPECIAL REFERENCE TO THE PATHOLOGY INVOLVED

BY ROBERT D. LARSEN, M.D., and
JOSEPH L. POSCH, M.D.

From the Department of Surgery, Wayne State University College of Medicine, The University Surgical Service of the Grace Hospital and the Surgical Service of the City of Detroit Receiving Hospital, Detroit, Michigan

Dupuytren's contracture, one hundred and twenty-five years after it was described by Dupuytren, remains a disease of unknown etiology. Histologic study of the specimens removed from sixty-one patients was undertaken. On the basis of these studies we have concluded that Dupuytren's contracture is a fibrous tissue proliferation which arises within the palmar fascia in intimate association with thick walled vessels and an increase in capillary vascularity. This tissue undergoes the well known stages of maturation of fibrous tissue until the stage of a firm, relatively avascular, contracted scar is reached. The pathological changes do not suggest to us that the lesion is due to inflammation or neoplasm. The significance of iron pigment in the early lesions needs further study. Surgery is the only form of treatment which will produce any lasting benefit in this disease, although administration of tocopherols and irradiation may produce some temporary improvement. The operation must be fitted to the individual patient. Complete excision of the fascia will be indicated in most cases; however, partial excision of the fascia and fasciotomy have their place in selected cases. With proper choice of operation and careful attention to operative details excellent or good results can be expected in between 80 and 90 per cent of the operated patients.

ARE YOUR PATIENTS PHYSICALLY QUALIFIED TO DRIVE?

(Continued from Page 1126)

important role in controlling the operation of these factors along our death ridden highways be played by the individual physician. He is in a position to judge the true nature of a particular case and prohibit driving. He, also, can educate his patients as to the importance of safe driving and the hazards involved when organic disease

factors impair or threaten adequate function. With the advantage of his position of intimate knowledge and influence, he must then appreciate his public responsibility and join his efforts with those of others who fight to reduce the toll of this largely preventable disease of society.

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ASIAN INFLUENZA

(Continued from Page 1162)

stored briefly near minus 70° C. Blood should also be taken for serum samples: one during the time of acute illness, and a second, two to four weeks later. Specimens of 10 to 20 cc. Each is desirable if specimens can be obtained. Throat washings, and blood samples should be sent to: Dr. Thomas Francis, School of Public Health, University of Michigan, Ann Arbor, Michigan.

Pharmaceutical houses are presently in a position to provide vaccine within the next several weeks, which should be effective against the Asian strain of influenza. It is of lessened value if not given a week or more before exposure. Just now there is little indication as to how epidemic this disease will become among the general population.

Doctor—To Serve Society Better

The past State Medical Society year has run swiftly as a mountain current. Like a cascading stream, it has dashed against giant boulders and gently splashed between green meadows. My metaphor refers simply to the problems and the accomplishments of our Society during the past 365 days. Never has there been a more exciting year and very few periods with such extraordinary accomplishments.

But as I write, the current still rushes and the boulders seem to become larger—so great in fact, that it is necessary to find out more about them—as some must be blasted out of the path of progress or dams must be erected to protect the fields of medicine. Again, my metaphor refers to the MSMS Market Opinion Survey, created to find out just what you, Doctor, and also what the people of Michigan want in medical care. Our monumental study—the largest ever undertaken by any state medical society—will chart our future course—will give us a pattern so our great resources may be used to the best advantage of the public.

As President, my last admonition to you is to study well the findings of this epic survey and to heed the direction signals which the report indicates. The practice of medicine, like a stream, may alter its course from time to time, but the principles behind Medicine always must be the same: to give to the people the best medical service available.

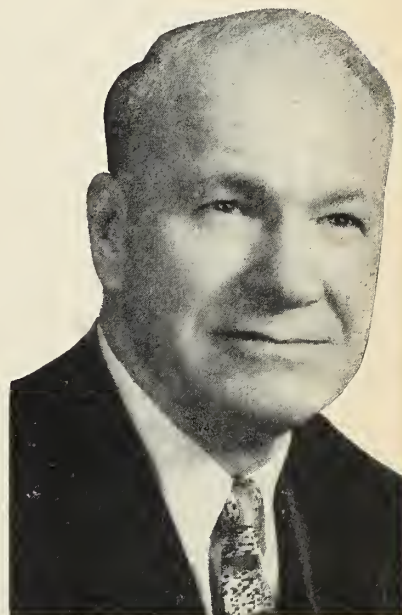
* * *

I come to the end of my tenure as your President with gratitude to all for allowing me this greatest honor of my life. I pledge a continuation of my zeal and labor for the altruistic purpose of the Michigan State Medical Society, which in essence is to equip each member of the medical profession to serve society better.

Rich Walls M.D.

President, Michigan State Medical Society

President's



Message

Editorial

TRAFFIC SAFETY NUMBER

The September number of *THE JOURNAL* of the Michigan State Medical Society, following a precedent of emphasizing diversified interests established many years ago, is devoting this issue to Traffic Safety. We are pleased to acknowledge the assistance of John B. Roger, M.D., of Bellaire, who helped to assemble the papers and advised in selecting the material published.

THE PHYSICIAN AND TRAFFIC SAFETY

You and I as physicians can do much to reduce the carnage on the highways. We cannot do it all, for there is no one simple remedy. Any significant reduction in highway accidents will be the result of a variety of efforts on the part of many groups of people: more careful methods of driver licensing, meeting the problem of the drinking driver, better car design, more and better driver education, better law enforcement, safer highways. Improvement depends on efforts in all these areas, not just in one or two.

Viewing the traffic safety problem in epidemiological terms, it is reassuring to observe that much progress has been made. While the totals each year remain distressingly alike, we must not forget that when traffic fatalities are reported on the basis of units of 100 million vehicle miles, it is two and one half times as safe to be on the highways now as it was in 1934 and 1935, the two worst years rate-wise that we have ever had. We killed 38,000 on the highways in 1955, but at the 1935 rate this figure would have been 95,000! We want to remember this improvement of the past when we are tempted to despair of our efforts of the present.

While it is reassuring to look at the past with the eye of the epidemiologist, it is frightening to look into the future with that same eye! The experts tell us that in the next ten or fifteen years we can expect a rise of 45 per cent in vehicle-mileage. If this is true, in the same period of time, we shall have to reduce the accident *rate* by nearly 50 per cent from what it is now in order even to just stand still!

There are a number of articles in this issue of *THE JOURNAL* which point up some of our responsibilities as physicians in the prevention aspect of this problem. In these areas which are uniquely medical, only the physician can guide. Much of this guidance will have to be given to patients individually, depending on the health problem involved. Some will be given corporately in the form of suggested educational approaches, licensing standards, et cetera. Not always will such guidance be appreciated or understood, for too many Americans think of their rôle as drivers as a constitutional right rather than as a privilege granted them by the State. But such guidance must be given, tactfully and persuasively.

This year, at the request of our State Medical Society, a bill was introduced into the Michigan Senate which, if adopted, would have done much to screen physically unfit drivers, and to make others with less serious defects into safer drivers. Yet this bill died in committee. This bill, or some modification of it, should be introduced again and again until it finally is adopted, even as Michigan's excellent student driver training bill had to be introduced a second year to get it out of committee and adopted by the Legislature.

We physicians must not forget that we also are citizens, and should be the spark-plugs of local community efforts towards safe driving. Our memberships in luncheon clubs and other community organizations give us unique opportunities to be catalysts for safety.

In addition we should not let the occasional necessity to hurry in an emergency become the pattern for all of our driving. The physician should set an example to his patients and neighbors for sober, careful and considerate conduct on the highways.

You and I have a unique opportunity to make the highways safer for our patients and ourselves. Let's use it!

JOHN R. RODGER, M.D.
*Chairman, MSMS Committee
on Study of Prevention of
Highway Accidents*

DO DOCTORS CHARGE TOO MUCH?

Dr. Frank G. Dickenson, head of the economics department of the American Medical Association, and *Medical Economics*, the magazine, have published material tending to prove that, in general, charges made by doctors are not excessive. They have demonstrated that hourly charges, as worked out by hours of duty—as compared to plumber's charges, for instance—actually bring a lesser return in terms of dollars. In spite of all the evidence, it is constantly asserted by pressure group leaders that "doctors' charges" are too high. Of course, all medical care and hospital services are included, but not stated.

An authentic exposition from an entirely new and unbiased angle is welcome. The *U. S. News and World Report* on its cover for July 5, 1957, in half inch high letters, black and red, asked, "DO DOCTORS CHARGE TOO MUCH OR NOT ENOUGH? What Government Figures Show." Sketches showing health cost values for the period 1936 to 1957 are most impressive: Accepting doctor's fees, cost of living and hospital bills for 1936 as 100, the diagram shows that hospital rates have increased to 387. Cost of living has gone up to over 205, doctors' bills on the same average have gone up to 178, and dental costs averaged just more than the medical profession, 185.

Eight pages are devoted to this study, with a mass of tables, rates and averages—all from government sources. The reason for the constant rise is still a question. Hospital rates are commented upon with the marked growing costs reaching over \$6,000,000,000 a year. Some hospitals are government-supported, federal, state or local, while others are voluntary or private. But all are in financial trouble.

It is very evident that all the people must learn to budget their health costs and accept a greater percentage of costs. This is primarily due to hospital costs which have almost quadrupled in the twenty years under study. The article in *U. S. News and World Report* stated specifically that doctors' charges have really followed far behind the cost of living, and no blame is justifiably imposed on the professional people involved in health services. Hospitals must accept their responsibility and the "why" is carefully avoided.

THE "WHY"

Many times, in these pages, attention has been invited to some of the basic reasons for hospital increased costs. Hospital labor, nurses, cooks, maids, all employes have always been woefully underpaid. For several years that condition has been on the remedy column. Wages and salaries constituted varying amounts of hospital costs depending on the reports and local conditions, but they are from seventy to eighty per cent of all costs of operating a hospital. These wages and salaries are still below equivalents in industry. A second item is that more services are used and needed by the increased and modern methods of care and attention all patients now receive.

Another question asked by *U. S. News and World Report* for June 14, and July 12, 1957, gives some more information. Place the value of the dollar of 1935 to 1940 at 100 cents of actual purchasing power and we find that the dollar of 1952 to 1956 is worth only 49.7 cents and is decreasing. It now takes over two dollars to buy as much work as one did. The same is true of supplies and everything else.

THE VALUE OF OUR MONEY

The invested dollar is earning less than the cost of living increase. In other words, the dollar and its interest earnings for the past ten years has actually depreciated. The two together are worth less. Something is wrong with our money control. It may be that the medical profession should take a hint from labor, and tie into our charges such items as our prepayment premiums and our retirement provisions with the cost of living. Labor was five years ahead of us in adjusting wages to cost of living and has profited much. Now labor is suggesting that social security and retirement annuities also be tied to the same varying value of the dollar, otherwise called "cost of living."

Tax expenditures by state governments, part of the cost of living, in the short space of eight years (1950-1957) have gone from \$12.3 billions to \$20.6 billions, and the appropriations for 1958 are \$22.5 billions.

Labor took particular pains to provide retirement funds through employers. Fixed rates were established to be paid in the far future after the working man should have passed sixty-five. Changing values have made those retirement monies

worth about one half the amount of anticipation. The same is true of social security payments which have also been increased. Labor leaders have recently proposed a tie-in of "cost of living." The workers realize their old age pensions, allowances or insurance are dwindling.

The self-employed citizen or professional man, who wishes equality with labor and who wishes ultimately to retire with the living \$5,000 a year would have provided in 1925, would have to invest in industrial stocks or corporate bonds for these years as follows:

<i>Industrial stocks</i>		<i>Corporate bonds</i>	
1925	\$105,260	1925	\$ 91,410
1949	\$ 76,760	1940	\$114,590
1950	\$201,220	1955	\$251,170
1957	\$206,820	1957	\$213,610

This gives a glimpse of values being asked to be set aside to guarantee a stable, non-decreasing income by the one unit of our society having the power to dictate.

IS MEDICAL PRACTICE CHANGING?

Those who have been in the profession a score or more of years know the practice of medicine is undergoing great changes. They have seen revolutionary changes in pharmacology with new drugs, appliances and methods. Fully 85 per cent of the methods and materials now used in medical practice were unknown a short score of years ago. Much of our exact scientific medical knowledge is also new. Surgery has made fantastic strides. The modern operator has at his command methods of anesthesia, methods of by-passing the heart, the kidneys, of entering those organs for elaborate procedures. No cavity of the body is now barred to curative procedures.

This short time has seen far more exciting and promising developments of skills and methods of healing than the whole preceding period. From a scientific and professional consideration, the medical world has and still is far outstripping all recorded history. But the welfare of our people who need advice and counsel involves much more than diagnosis and treatment of their ills. The idealism of our pioneers in economic and socio-medical problems have made just as rapid and just as rewarding contributions. They saw the need to assure the benefits of our vastly increasing medical know-how when only a small portion of our public were financially able to obtain the services. The

medical dreamers were faced with demands for government to dispense medical care on a compulsory "insurance" basis. Private study, research, trial and error, spurred on by the knowledge that no matter how skillful or successful our services might be, has shown that even if no one could pay for them, there was still a need. Those inspired and devoted dreamers knew that a helping hand in the form of methods of paying which were much less painful, would be a boon to the patients and their families. Criticism and discouragement failed to stop the spontaneous grass roots movement which changed the time worn and unhappy methods to a budgeting and prepayment success. This, the medical profession gave our people.

We are now in another era of need with more demands and more problems, and again there is a demand for someone else than the profession to administer and "run the show." Again it will take the concerted and continuous administrative ability of an understanding group—the doctors themselves—and not just a few of them but such an overwhelming percentage that no question may arise.

THE PROGRAM

The socio-economic problems are an extension of those of a decade or two ago. They can and will be solved—and by the same kind of devotion and dedication that was so successful before. The profession must work together, or we shall work separately under orders, and not as efficiently. Labor unions and the government are pressing, they would like the opportunity to put the professional man on an hourly schedule whose work hours might well be far from their own projected thirty-six hours a week. Few doctors are now working less than about sixty, but they are their own task masters.

The growth of voluntary health plans has changed the picture of unpaid medical accounts from one of being left unpaid, to one where prompt payment of the account in almost its entirety can be anticipated. Let us preserve the concept responsible.

There must be no delay. The labor leaders and the government bureaucrats, still in the seat of the mighty, are ready and anxious for one single failure to prove their contention that neither the medical profession nor the other voluntary plans

can give the complete services they say their people wish. Government will be pressured into the actual administering roles they are ready and eager to assume.

The House of Delegates in our September meeting will have made a decision. We are confident it will have been right. Whatever the outcome, the medical profession must not follow the lead of our brothers in England who are now regretting—and belatedly fighting for *right*.

ASSISTANT EDITOR NAMED



LOUIS J. BAILEY, M.D.

President-Elect of the Wayne County Medical Society, Louis J. Bailey, M.D., has been named by the Council of the Michigan State Medical Society as Assistant Editor of *THE JOURNAL* of the Michigan State Medical Society. The Editor is Wilfrid Haughey, M.D., of Battle Creek.

Dr. Bailey was born in Detroit and received his M.D. degree from Wayne University College of Medicine in 1925; M.Sc. (Med.) University of Pennsylvania in 1939. He interned at Providence Hospital and now specializes in internal medicine. He is on the staff of Wayne County General and Detroit Receiving Hospital, a Fellow of the American College of Physicians, and has been an Instructor of Clinical Medicine at Wayne University since 1928.

He has been a member of the Wayne County Medical Society since 1932, served as President of the Noon Day Study Club 1938-39, Chairman of the Membership Committee 1937-39, Chairman of the Program Committee 1945-46, editor of *Detroit Medical News* 1954-56, and trustee in 1955, also as delegate to the Michigan State Medical Society. He served in the U. S. Navy from 1918-1919.

Dr. Bailey is married and has three children. He makes his home in Birmingham.

In the past fifty-six years, mortality from tuberculosis has declined from 199 to 8 per 100,000 population, according to Health Information Foundation. While this is remarkable progress, tuberculosis is still a great health problem, with 100,000 new cases reported in the United States in 1955.

HELLER REPORT



WM. A. HYLAND, M.D.

The House of Delegates of the American Medical Association, in its final hours before adjournment in New York City at the annual session, received a report from the Board of Trustees that a business and managerial report had been made by Robert Heller and Associates. The Trustees and the House, respecting the confidential nature of the report,

directed that a committee be appointed to receive the report, study it, and bring in recommendations at the Philadelphia meeting in December.

That committee is appointed and at work. The Chairman is William A. Hyland, M.D., of Grand Rapids, chairman of the Michigan Delegation to the AMA. Other members are: Louis A. Alesen, M.D., California; Harlan English, M.D., Illinois; Norman Welch, M.D., Massachusetts, and Charles T. Stone, M.D., Texas.

The Reference Committee which considered this report wrote:

"Your Reference Committee concurs with the Board of Trustees that a committee of five members of the House of Delegates be appointed by the Speaker to study the report and to select those portions which should receive action by the House, to discuss those recommendations with the Executive Committee of the Board of Trustees and such others as may be deemed appropriate, and to submit a report with recommendations to the House of Delegates at its next session (Clinical Session, Philadelphia, December 3-6)."

Copies of this report have now been sent to members of the House of Delegates, the AMA officers, and to the State Medical Societies. The Editor is informed that the report and the work of its study committee form probably the most important positive action the AMA has taken for many years. We congratulate Michigan for possibly sparking the study resulting in this Heller Report, and for furnishing the committee chairman.

We congratulate William A. Hyland, M.D., who has received many testimonials of our esteem by receiving our highest offices, and who is still in the top echelon of our advisors. He has the responsibility for interpreting and implementing this new step in medical life.

Michigan's Department of Health

Albert E. Heustis, M.D., Commissioner

SPECIAL PROJECTS IN PUBLIC HEALTH CHRONIC DISEASE PROGRAM DEVELOPMENT

Operating within legislative authority and departmental regulations and policies, the Division of Tuberculosis and Adult Health of the Michigan Department of Health functions to control the spread of tuberculosis and the venereal diseases; and to encourage and promote programs directed at the prevention of occurrence of chronic disease and the control of its progression, including the promotion of early detection, adequate treatment and rehabilitation.

For a number of years, the basic budgets of local health departments have included provision for chronic disease program development. As a further supplement to these allotments, the Michigan Department of Health has used the method of special projects to stimulate expansion of current activities and to demonstrate new knowledge and techniques.

The major disease categories receiving allocation through special projects include tuberculosis, cardiovascular diseases, cancer, diabetes and syphilis. Tax support has come from two sources (for 1956-57); a state appropriation of \$250,000.00 for expanded tuberculosis case finding and control and; approximately \$50,000.00 from Federal grants for programs in cancer and heart disease. In addition, voluntary health agencies have provided financial aid and professional technical service on a local and State basis. Conservative estimates of this support, primarily from tuberculosis associations and cancer societies, totals \$30,000.00 for the period.

Thirty-four local health departments representing fifty-four counties and four cities have received direct financial assistance through special projects.

Functionally, project activities carried out from July 1, 1956, to June 30, 1957, can be summarized as follows:

1. *Case finding:* Chest x-ray screening for tuberculosis, pulmonary neoplasm, cardiac abnormalities; hospital admission x-raying; Mantoux tuberculin testing (children and adults); cervical screening, general cytology; mass blood surveys (venereal disease, diabetes), multiple screening follow-up; special investigation of problem cases, stationary and itinerant tuberculosis clinics.

2. *Case Management (Treatment, Care and Rehabilitation):* Medical administration and clinical service (tuberculosis, venereal disease); medical social service; rehabilitation nursing demonstration, home care (nursing), adult health clinic service and diagnostic and treatment centers for venereal disease.

3. *Records Management:* Refinement of Central Tuberculosis register (State and local), promotion of voluntary reporting of cancer; refinement of venereal disease reporting.

4. *Education and Training:* Provided medical externship with field work in tuberculosis, cancer and heart diseases. Conducted professional conferences and institutes on chronic disease in general and with specific disease entities; initiated public education activities designed to promote voluntary participation in case finding surveys; planned lay education, services and materials to promote greater awareness of the needs and resources in chronic disease control; established a training program for radiotherapy technicians for cancer therapy; provided practicing physicians with annual subscription to the *Heart Bulletin*.

5. *Operational Research:* Study of health education needs of tuberculosis patients and families in terms of modern therapy; study of the values and limitations of hospital admission x-raying; an evaluation of tuberculin testing among student nurses; study of tuberculosis home care costs; study of the nature and scope of chronic disease in a selected county; study of the values and limitations of 70 mm. x-ray screening in early detection of pulmonary neoplasm and heart disease; study of the prevalence of non-tuberculous abnormalities among patients in nursing and convalescent homes; study of tuberculosis control measures (tuberculin, BCG, chest x-ray) among student nurses.

The variety of functions outlined above were abstracted from reports of the fifty-two special projects operating in the fiscal year 1956-57. They represent the combined efforts of the State and local health departments, hospitals and voluntary health agencies. In each instance, the proposed projects were presented to the medical profession (state and/or local) for study, advice and support.

It is readily recognized that these activities, when evaluated in terms of the total problem of long term illness, represent only the preliminary steps to a concerted attack on the problem. They do provide evidence, however, of a gradual reorientation of community health services to meet this challenge.

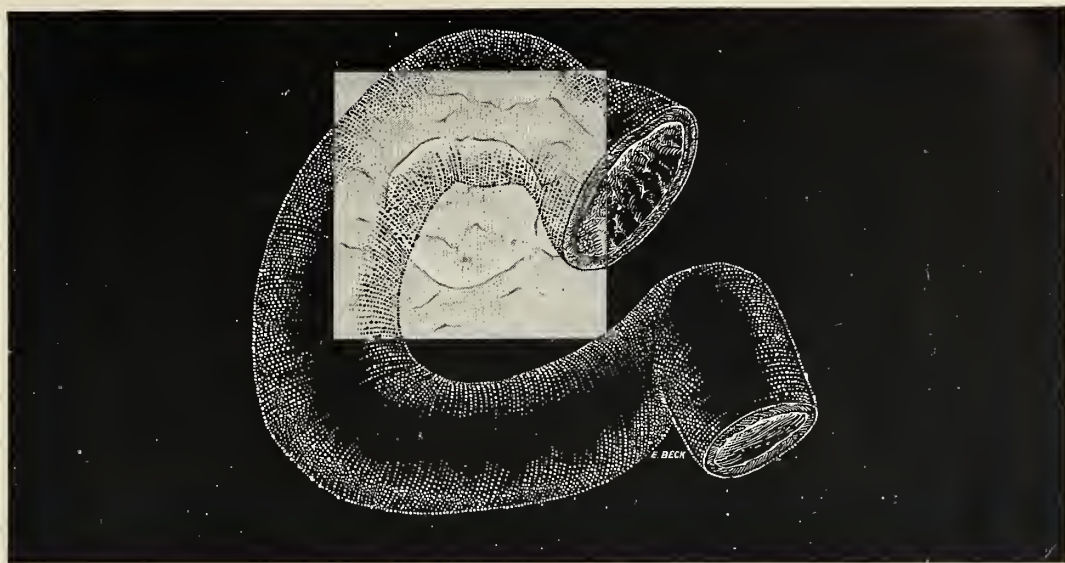
HOSPITAL COSTS

Since the last Blue Cross rate adjustment in March, 1956, hospital costs have increased from an average daily charge of \$25.96 to \$28.60, an increase of 10 per cent. In 1950, the average number of employees in all hospitals in Michigan was 180 persons per 100 patients. In 1957, this has risen to 207, an increase of 15 per cent. Since more than 70 per cent of hospital costs are salaries and wages, that accounts for at least 10 per cent.

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Research in the Service of Medicine.

1. Lichstein, J.; Morehouse, M. G., and Osmon, K. L.: *Am. J. M. Sc.* 232:156 (Aug.) 1956.

2. Sun, D. C. H., and Shay, H.: *Arch. Int. Med.* 97:442 (April) 1956.

3. Rafsky, H. A.; Fein, H. D.; Breslaw, L., and Rafsky, J. C.: *Gastroenterology* 27:21 (July) 1954.

4. Schwartz, I. R.; Lehman, E.; Ostrove, R., and Seibel, J. M.: *Gastroenterology* 25:416 (Nov.) 1953.

5. Silver, H. M.; Pucci, H., and Almy, T. P.: *New England J. Med.* 252:520 (March 31) 1955.

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In Memoriam

Bruce Anderson, M.D., aged eighty-three, Pontiac physician, was a graduate of McGill University, Montreal, and a member of the American College of Surgeons. A charter member of Oakland Hills Golf Club, Dr. Anderson also belonged to the Blue Lodge, Detroit, Central Methodist Church and was a left member of the Detroit Boat Club. Death occurred July 4, 1957.

Roscoe W. Cavell, M.D., aged sixty-one, professor of psychiatry at the University of Michigan Medical School, died July 13, 1957, of a heart condition. Dr. Cavell was born January 20, 1896, in Hamburg and received his degree as doctor of medicine in 1921 from the College of Medical Evangelists at Loma Linda, California.

During World War II, he was chief medical officer (Colonel) of the U. S. Induction Station in Detroit before being transferred in 1944 to the Ninth Army as a consultant in neuropsychiatry.

Leland V. Hewitt, M.D., aged fifty-eight, Detroit and Grosse Pointe physician and surgeon, was born in Brooklyn, Michigan, and was graduated from the University of Michigan Medical School in 1923 to intern at Grace Hospital. Dr. Hewitt was a member of the Detroit Yacht Club and Phi Chi Fraternity. He died July 6, 1957.

Eugene L. Kendall, M.D., aged seventy-eight, a native of Grand Rapids, began his practice in that city in 1909. He was a graduate of the Detroit College of Medicine and Surgery, a life member of Valley City Lodge, Columbia Chapter, a member of the Knights of Pythias and the First Congregational Church. Death occurred on July 16, 1957.

Edward A. Malik, M.D., aged forty-nine, Detroit general practitioner, died June 1, 1957, of a heart affliction which had plagued him since his youth.

Dr. Malik interned at Grace Hospital after his graduation from Wayne State University Medical School in 1939. He had a residency at Grosse Pointe Hospital.

George W. Moore, M.D., aged eighty-nine, at one time Bay City Health officer, died July 15, 1957. During Dr. Moore's fifteen-year tenure in office, he fought on two separate occasions to save the city-operated General Hospital from being closed by city commissions. In 1931, he was instrumental in tracing a typhoid carrier responsible for several deaths in that year. In the same year, he promoted a smallpox vaccination program in which 11,000 Bay City residents received vaccinations. In other accomplishments, he played a part in establishing the first controls of the city over its milk supply, in forcing retail food dealers to cover foods in stores, in revising and improving plumbing ordinances and the tearing down of old houses that menaced public health.

Dr. Moore was born in Norwich, Ontario, and was graduated from Marquette University School of Medicine in 1898. He had maintained a private practice at his residence since retiring as health officer in 1940.

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Legal Opinion

Dear Mr. Burns:

You recently referred to me a communication which states that at a recent meeting of physicians of a certain area the medical profession was publicly indicted for "refusal to draw blood alcohols on suspected drunken drivers who are brought to the hospital emergency room." The letter further states that the doctors of the area would be happy to co-operate with the police but feel that they are not "legally allowed to draw blood from anyone without his written permission which is given in a state of complete sobriety."

Although I do not believe that the applicable legal rule is quite as comprehensive as there stated, I agree completely that the medical profession should not be indicted for refusal to draw blood alcohols indiscriminately.

I know of no court decisions directly in point, but I think that under well-recognized general principles a doctor has no right to draw a blood sample without the consent of the patient. To do so, in my opinion, might constitute an assault and would certainly be an invasion of the person. I believe that the letter may overstate the case slightly by indicating that the permission must be "written" and that it must be given in a state of "complete" sobriety.

I doubt that permission would necessarily have to be in writing, although certainly this is advisable as a matter of protection to the doctor. I doubt also that "complete sobriety" would be necessary to give valid consent. I think the true test of ability to give consent would be that the subject be capable of understanding the situation and be able to give a conscious and rational consent or refusal to the test. This would necessarily have to be determined by the physician from observation and by questioning the subject. When I question the use of the words "complete sobriety," I have in mind that many authorities will adopt the view that even minute amounts of alcohol will cause an individual to be less than completely sober. I think the true test should be whether the subject appears, under ordinary observation, to be capable of giving a voluntary and rational consent with understanding of what he is doing.

Unless the physician is able to obtain such consent. I am of the opinion that the drawing of a blood sample would be an unauthorized and unwarranted act. Certainly, in my opinion, the public indictment of the medical profession of the area based on refusals to draw blood samples indiscriminately on the request of the police or other lay agencies is wholly unfair and unwarranted.

Very truly yours,
LESTER P. DODD
Legal Counsel

*Lansing, Michigan
August 12, 1957*

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* * *

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1. Hughes, J., et al.: *South. M. J.* 47:1082, 1954.
2. Kerley, L., and Headlee, C. P.: *J. Am. Pharm. A. (Scient. Ed.)* 48:82, 1956



NEWS MEDICAL

MICHIGAN AUTHORS

Vito DeFilippis, M.D., and Irving I. Young, M.D., Detroit, are the authors of an article entitled "Evaluation of Adrenocortical Function with Intramuscular Injection of ACTH Gel," published in the *New England Journal of Medicine*, July 4, 1957.

Laurence S. Fallis, M.D., Detroit, is the author of an article entitled "The Billroth I Gastroectomy," published in *Surgery, Gynecology and Obstetrics*, July, 1957.

Robert L. Cowen, M.D., Detroit, is the author of an article entitled "Tumor of the Tunica Vaginalis Testis: Case Report of Neurilemmoma," published in the *Journal of Urology*, January, 1957.

Hun Jae Lee, M.D., Ann Arbor, is the author of an article entitled "Metastatic Carcinoma in the Brain," published in the *University of Michigan Medical Bulletin*, June, 1957.

Arthur L. Norins, M.D., Chicago, formerly of Ann Arbor, is the author of an article entitled "Osteoprosis," published in the *University of Michigan Medical Bulletin*, June, 1957.

Donald G. Marquis, E. Lowell Kelly, James G. Miller, Ralph W. Gerard, and Anatole Rapoport, Ann Arbor, are the authors of an article entitled "Experimental Studies of Behavioral Effects of Meprobamate on Normal Subjects," published in *Annals of the New York Academy of Sciences*, May 9, 1957.

James H. Wible, M.D., Lyle F. Jacobson, M.D., Prescott Jordan, Jr., M.D., and Charles G. Johnston, M.D., Detroit, are the authors of an article entitled "The Correction of Aortic Insufficiency with a Spring Valve Prosthesis," published in *AMA Archives of Surgery*, June, 1957.

D. Emerick Szilagyi, M.D., John G. Whitcomb, M.D., and Claibourne P. Shonnard, M.D., Detroit, are the authors of an article entitled "Replacement of Long and Narrow Arterial Segments," published in *AMA Archives of Surgery*, June, 1957.

T. Frederick Johnson, M.D., Detroit, is the author of an article entitled "Blood Changes Following Estrogen Administration," published in *Medical Science*, March 25, 1957.

J. DeWitt, Fox, M.D., Detroit, is the author of an article entitled "Narcotic Addiction Among Physicians," published in *THE JOURNAL* of the Michigan State Medical Society, and condensed in *Current Medical Digest*, June, 1957.

Charles T. Disney, M.D., Detroit, is the author of an article entitled "An Approach to Radiation Health Problems in Industry," presented at the Nineteenth

Annual General Motors Medical Conference in St. Louis, April, 1957, and published in *Industrial Medicine and Surgery*, July 1957.

* * *

Hurricane Audrey.—On June 27, 1957, Hurricane Audrey blew through several parishes of Louisiana and destroyed over 500 lives. Two villages were practically wiped out. Three doctors lost their homes, offices, furniture, equipment, and one three children. Red Cross reports that the doctors of the area worked heroically and continuously for days, with a well-executed relief program. The Louisiana State Medical Society has established a relief fund with letters to all their members to replace the lost homes, offices and equipment so these young men under thirty-seven may continue their practice. Funds are being accepted from other states than Louisiana, and should be sent to Cameron Parish Medical Relief Fund, c/o Louisiana State Medical Society, Room 105, 1530 Tulane Ave., New Orleans, La.

* * *

The Michigan Association for Retarded Children held its Annual Conference on September 5, 6 and 7 at Central Michigan College at Mt. Pleasant. The theme of the conference was "Co-operative Planning to Meet Needs of Retarded Children." Michigan doctors participating in the program are William Kelly, M.D., Lansing; Norman Westlund, M.D., Saginaw; William L. Harrigan, M.D., Mt. Pleasant; Paul H. Jordan, M.D., Flint; Robert W. Talley, M.D., Kalamazoo; James L. Wilson, M.D., Ann Arbor; and Vernon Steham, M.D., Lansing.

* * *

World Medical Association.—The House of Delegates of the American Medical Association urged the members to join the American Committee of the World Medical Association and become active in its affairs. The twelfth annual session of the WMA will be held in Copenhagen, August 15-20, 1958. Anyone interested in attending should begin making arrangements, as travel may be crowded at that time.

The chairman for Michigan on individual memberships is William A. Hyland, M.D., Grand Rapids.

* * *

Medical Costs Under Public Assistance.—The Bureau of Public Assistance reports that incomplete statistics indicate that hospital care is the most expensive item involved in the medical care of individuals supported by federal-state public assistance programs. Involved are four categories: the needy aged, blind, dependent children and permanently and totally disabled. In addition

(Continued on Page 1178)

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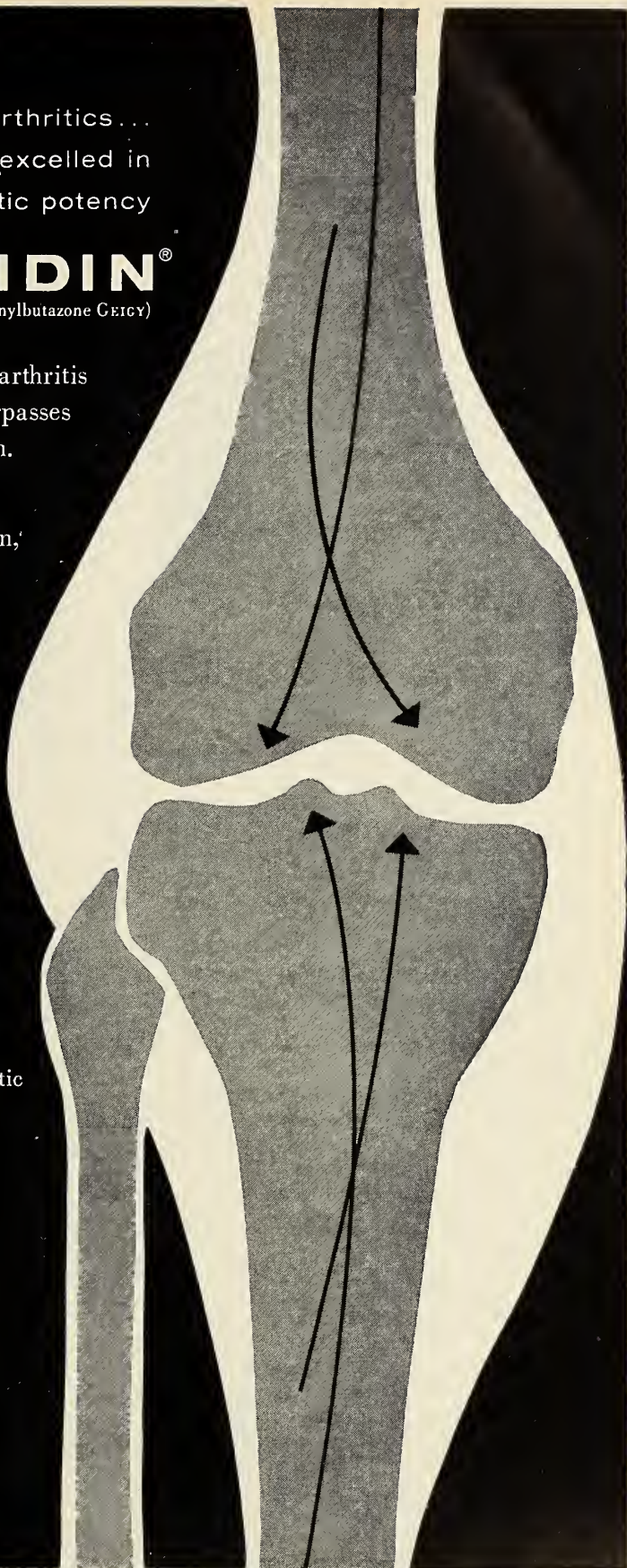
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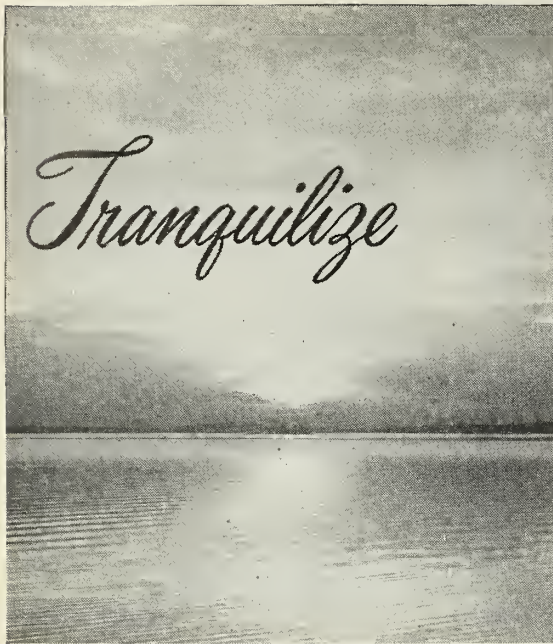
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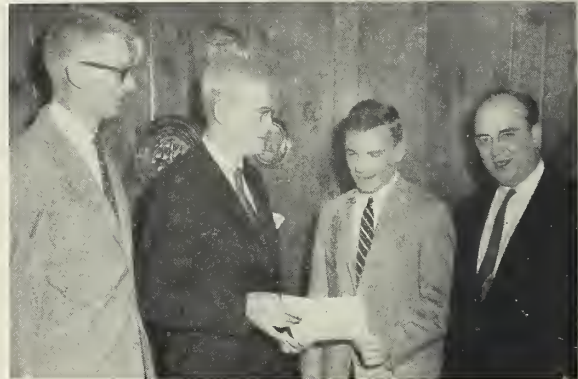
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(Continued from Page 1176)

to helping states pay for these people's support, the U. S. also sets aside additional money for their medical bills, money which must be matched in part by the states. The bureau's survey, for July-December, 1956, includes data from 20 states. Hospital care accounted for 37.9 per cent of the medical costs, nursing homes and home care maintenance for 29.5 per cent, drugs and supplies for 13.8 per cent, physicians' services for 13 per cent and other services for 7.9 per cent. The bureau now is attempting to obtain more complete information from a larger number of states on the cost breakdown in the various items of medical care under PA.

* * *



A Mead Johnson Award for Graduate Training in General Practice—a \$1,000 grant to assist in residency training of physicians—was received by Dr. Richard A. Ferrington (third from left in picture) at a meeting of the Midland County Medical Society recently in Midland. Dr. Ferrington, a graduate of the University of Michigan Medical School, had just completed his internship at the Midland Hospital and planned, with help of the Mead Johnson Award, to enter residency training this summer at the University of Michigan Hospital, Ann Arbor. Shown presenting the award to Dr. Ferrington is Dr. E. Clarkson Long, secretary of the Michigan Branch of the American Academy of General Practice. At far left is Bernard E. Lorimer, administrator of the Midland Hospital, and at right is Charles Coffman, District Sales Manager for Mead Johnson & Company, sponsor of the General Practice Awards. Ten such scholarships were granted this spring by the American Academy of General Practice.

* * *

The Atomic Energy Commission announces the award of sixty-seven Life Science Research contracts in the field of atomic energy; fifteen of the contracts are new allotments. Michigan benefits as follows: University of Michigan, L. A. Bernstein, investigator, "Effects of Radiation on the Intermediary Metabolism of Mammalian Skin," \$9,000; Wayne State University, J. E. Lofstrom, investigator, "Studies on the Effects of Maternally Administered Phosphorus-32 on Foetal and Postnatal Development of the Rat," \$10,000; Michigan State University,

(Continued on Page 1180)

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*HARDY, J. A.: *Obstet. & Gynec.* (Nov., 1956)

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(Continued from Page 1178)

J. L. Fairley, investigator, "The Role of Various Aliphatic Acids in Pyrimidine Biosynthesis," \$5,140; Wayne State University, "Summer Institute of Radiobiology for High School Science Teachers," A. J. Forvald, investigator, \$34,782. This is a new project.

* * *

The revised doctor draft bill has become Public Law 85-62; it was signed by President Eisenhower, June 27, four days before the expiration of the old doctor draft law. Under the latter, some 10,000 physicians were called up for two or more years of service, starting back at the time of the Korean war. The new law provides for the selective call-up of physicians and dentists to age thirty-five, if they were deferred from the regular draft at any time after June, 1951, in order to complete their professional training. The law is effective for two years, expiring at the same time as the regular draft. Defense Department estimates that the 2,200 physicians required by the services this fiscal year will come from volunteers.

* * *

Medical and scientific meetings scheduled for Washington, D. C., the balance of this year are: American Roentgen Ray Society, October 1-4, anticipated registration 2,000; Fifth Annual Antibiotics Symposium, October 2-4, anticipated registration 700; D. C. Medical Society Scientific Assembly, October 14-16, anticipated registration 3,500; Association of Military Surgeons, October 27-30, anticipated registration 1,500; Medical Society of Virginia, October 27-30, anticipated registration 200; Pan-American Congress of Pharmacy and Biochemistry, November 3-8, anticipated registration 1,000; Maryland-District of Columbia-Delaware Hospital Association, November 6-8, anticipated registration 2,000; Congress of Neurological Surgeons, November 7-9, anticipated registration 300.

* * *

Medicare Contracts.—All 56 of the government's Medicare contracts expired June 30, but every one has been renewed, without a single exception. New contracts are for periods of seven to seventeen months, arranged in escalator fashion so that there will be no more than six termination in any one month hereafter. Lieut. Col. Ralph Richards, who had responsibility for contract renewals under general supervision of Maj. Gen. Paul I. Robinson, Medicare director, credited "the fine spirit" of AMA, state medical societies, and other parties directly involved for the expeditious handling of negotiations. Shortest term agreements on medical care payments are those with Florida, New Hampshire, North Dakota, Puerto Rico and Wisconsin, expiring *January 31, 1958*. *February 28*: Arizona, California, Georgia, Mississippi, Idaho. *March 31*: Arkansas, Indiana, Michigan, New Mexico, Rhode Island. *April 30*: Alaska, Delaware, Iowa, Minnesota, Nevada, Texas. *May 31*: Alabama, Connecticut, South Dakota, Vermont. *June 30*: Blue Cross, Mutual of Omaha, Maine, New Jersey, Ohio, Oklahoma. *July 31*: District of Columbia, Illinois, Kansas, Kentucky,

(Continued on Page 1182)

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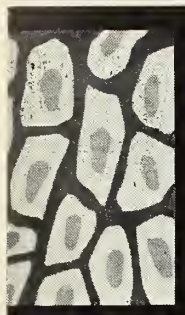
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The Wisconsin Alumni Research Foundation has licensed the production of such a complete protein in the form of V¹⁰ Protein Concentrate. V¹⁰ Protein is composed entirely of grains, yet results of laboratory tests by the Foundation show that it has a protein efficiency value equal to casein, the high quality protein standard commonly used in protein evaluation work.*



Now V¹⁰ Protein is available in Michigan in V¹⁰ Protein Bread and V¹⁰ Protein Graham Crackers. These delicious foods add variety to the daily dietary requirement for protein. V¹⁰ Protein Bread and Graham Crackers will greatly aid in the planning of meals and will help promote health and vigor for all age groups.

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*A complete report on these animal feeding studies is available on request. Address WISCONSIN ALUMNI RESEARCH FOUNDATION, P. O. Box 2217, Madison 1, Wis.

(Continued from Page 1180)

New York. August 31: Hawaii, Louisiana, Maryland, Massachusetts, Montana. September 30: Missouri, Kansas City and St. Louis (separate contracts), Nebraska, North Carolina, Washington. October 31: Colorado, Oregon, Pennsylvania, South Carolina. November 30: Tennessee, Utah, West Virginia, Wyoming. NOTE: Blue Cross and Mutual of Omaha serve as fiscal agents for hospitalization of military dependents in civilian institutions.

* * *

Polio Grants.—The University of Michigan Hospital in Ann Arbor has been awarded a grant of \$111,230 from the National Foundation for Infantile Paralysis for a poliomyelitis respiratory and rehabilitation center. The grant is one of sixty-seven grants and appropriations, totaling \$4,527,064, made on recommendations of advisory committees composed of leading medical educators and others in the health field. Besides supporting polio respiratory and rehabilitation centers, the awards will support research to solve problems of polio and other viruses, research into treatment of polio after-effects and a professional education program aimed at relieving shortages of workers in health fields and raising the quality of care for polio and other patients.

* * *

Nutrition in Pregnancy will be the subject of the 1957 symposium of the Council on Foods and Nutrition of the American Medical Association to be held October 11 at the University of Missouri Medical Center, Columbia, Missouri.

This meeting will provide an excellent opportunity for the physician and members of the allied professions to acquaint themselves with current findings in nutrition and the practical application of these findings to the management of obstetrical patients.

A copy of the program is available on request.

* * *

An all-day symposium on "Recent Developments in Diabetes Mellitus" (pathology, diagnosis and therapy) will be sponsored by the Chicago Diabetes Association on November 20, 1957, at the Drake Hotel, Chicago. Registration is scheduled for 8:45 A.M. and lectures will begin at 9:00. Physicians registering for the course will be charged an enrollment fee of \$25.00, with the exception of members of the Chicago Diabetes Association and the American Diabetes Association, who may enroll without charge.

Members of the Academy of General Practice who attend the conference may claim hour-for-hour Category II credit.

Henry T. Ricketts, M.D., Professor of Medicine, University of Chicago Clinics, will be moderator.

* * *

The Legislature of Alabama, at its last session, constituted the Medical Association of Alabama as the State Board of Health. The next session of the Association at Montgomery will be the first under the new law, and will consist of measures to provide better days for the people of Alabama. The successful working of the plan can be very promising. Other states might follow this

(Continued on Page 1184)



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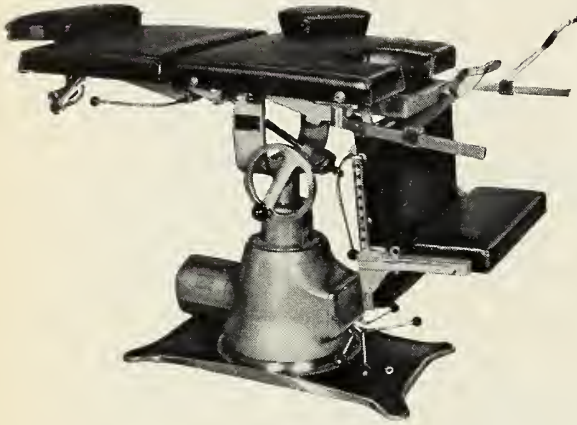
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(Continued from Page 1182)

lead. In Michigan, the State Medical Society first constituted itself as the State Board of Health, and soon engineered the establishment of our separate board.

* * *

J. Irvin Nichols, head of the Kentucky Tuberculosis Association for six years, has been appointed executive secretary of the Michigan Tuberculosis Association. On September 1, he succeeded Theodore J. Werle, who has been appointed executive secretary emeritus. Werle, who is completing forty-seven years of work in the voluntary tuberculosis movement, joined the Michigan Tuberculosis Association in 1921 and became executive secretary the following year.

* * *

The American Medical Writers' Association will hold its fourteenth annual meeting, held at the Sheraton-Jefferson Hotel, St. Louis, September 27-28, under the presidency of Dean F. Smiley, B.A., M.D., Evanston, Illinois, Secretary, American Association of Medical Colleges. Eighteen medical writers and authors will address this—"The Americas' Only Association Exclusively Devoted to Improvement in the Communications of Medicine and Allied Sciences." The speaker list for September 27 includes J. R. Gray, M.D., of Parke, Davis, Detroit. On September 28, the program will be a workshop on Medical Writing by six well-known persons.

All members of the American Medical Writers' Association and other collegiate graduates are cordially invited and urged to attend this meeting. There is no charge for the meeting September 27, but there is a registration fee of \$5.00 for non members of the Association who attend the workshop on September 28. The twenty-second annual meeting of the Mississippi Valley Medical Society—"The Midwest's Greatest Intensive Post-Graduate Medical Assembly," will also meet at the Sheraton-Jefferson Hotel, September 25, 26, 27. Further details of both meetings may be obtained from Harold Swanberg, M.D., Secretary, W.C.U. Bldg., Quincy, Illinois.

* * *

Michigan doctors certified by the American Board of Obstetrics and Gynecology on May 25, 1957, are: Richard C. Ashcom, 110 W. Sugnet St., Midland; Everette Gustafson, 236 Riker Bldg., Pontiac; John M. Nehra, 18408 Mack Ave., Grosse Pointe 36; George S. Sayre, 523 W. Cross, Ypsilanti; Robert L. Segula, 518 Riker Bldg., Pontiac; John J. Turner, 25447 Plymouth Rd., Detroit 39; Corwin G. Van Der Veer, 68 Ransom N.E., Grand Rapids.

* * *

M. K. Newman, M.D., Detroit, presented a paper entitled "Progressive Muscular Dystrophy-Clinical Aspects" at the meeting of the Michigan State Society of Muscular Dystrophy, at Morton House, Grand Rapids, on July 13, 1957.

(Continued on Page 1186)

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*REFERENCE: J.A.M.A. 163: 359, 1957 (February 2)

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1. Pollock, B. E., and Pruitt, F. W.: *Am. J. M. Sc.*, 226:172, 1953.

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(Continued from Page 1184)

Donald G. Marquis, M.D., Ann Arbor, presented a paper at a Panel on Tranquilizing Drugs, at the Hotel Sherman, Chicago, on May 20, 1957. The title of the paper was "The Effects of Tranquilizing Drugs on Normal Persons."

* * *



A. H. WHITTAKER,
M.D.

Alfred H. Whittaker, M.D., of Detroit, was appointed a member of the Mackinac Island State Park Commission by Governor G. Mennen Williams on July 22. Doctor Whittaker attended his first Park Commission meeting on August 12, and stressed the need for preserving the historical character of Market Street and the downtown area of Mackinac Island.

Congratulations, Commissioner Whittaker!

* * *

MEDICAL TELEVISION SHOWS

Produced by Michigan Health Council

WJBK-TV, Detroit

June 2—"To Save a Life" (Film).

June 9—"Secrets of the Heart" (Film).

June 16—"Cerebral Palsy"—Guests: Mrs. Francis Shilling, Reuben Kurnetz, M.D., Mrs. Maryann Aman, George V. Pendy, M.D., Miss Mary Cook, all of Detroit.

June 23—"Preface to a Life" (Film).

June 30—"Water Safety" (Film—"Learning How to Swim").

July 7—"Public Opinion Survey"—Guests: L. Fernald Foster, M.D., and Mrs. Ruth Van Damme, both of Detroit. Also J. K. Altland, M.D., Hugh W. Brenne-man and Kay Asby, all of Lansing.

July 14—"Health Careers" (Films—"Medical Associates" and "Health Careers").

July 21—"Mental Health" (Film—"We, the Mentally Ill").

July 28—"Guard Your Heart" (Film).

WKAR-TV, East Lansing

June 6—"Search for T.B."—Guests: George N. Phillips, M.D., of Jackson; John Isbister, M.D., Theodore J. Werle, Miss Margaret Farro, all of Lansing.

* * *

Doctors of Medicine have given \$500 million in the last ten years toward expanding and improving community hospitals—according to a survey among members of the American Association of Fund-raising Counsel and other professional fund-raisers. The study shows that M.D.'s contribute nearly 20 per cent of the total amount raised in most hospital campaigns.

* * *

We can no longer say that the development of home care programs is a future charge on health departments. The time is now.—LEONARD A. SCHEELE, M.D., Surgeon General, PHS, *Public Health Reports*, Published January, 1956.

* * *

The Southern Medical Association broke ground for its new office building in Birmingham, Alabama (Highland Avenue and Niazuma Street), on August 4, 1957.

* * *

(Continued on Page 1188)

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Your patients will like this *new, different* treatment for *fast, effective, pleasant relief* from the discomforts caused by

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Because of its thin, one-piece seamless shell, the INSTA-MELT spherical capsule releases its *pleasant soothing vapors immediately* when dropped into a cup of hot water or a vaporizer. Nothing messy . . . quick . . . easy to use!

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• Vitamin A, natural and synthetic in various unit potencies.

• Tocopherols (Vit. E) in 50 mg. and 100 mg. concentrations.

• Vitamin B-12—25 meg. concentration.

• Vitamin A and D in various potencies.

• Dextro-Amphetamine sulfate—5 mgs.—capsule size (2 minim).

We will be pleased to mail our catalog showing our full line of pharmaceuticals. Write for it today.

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FRASER, MICHIGAN

(Continued from Page 1186)

New Safety Automobile.—In *The Massachusetts Physician* for June-July, 1957, there is an article and a picture of the Liberty-Cornell Safety Car. This is a new safety automobile, which was designed to give both driver and passenger maximum protection against collision injuries. It is the result of a joint study undertaken by the Cornell Aeronautical Laboratory and the Liberty Mutual Insurance Company. The car possesses (1) rounding bumpers to produce a glancing blow rather than a direct one, (2) side bumpers to reduce shock of impact and property damage, (3) energy absorbing material between the bumper face and the frame, (4) recessed headlights to avoid protuberances at the front end.

Even more daring are the interior changes: (1) the driver is placed in the center to obtain maximum visibility and better control of the car, (2) steering wheel is replaced by a lever-type, power-steering system. Under crash conditions, the driver is kept in position by a U-shaped webbing supported between two side arms, (3) conventional seats are replaced by bucket seats.

Other safety features of this car are: augmented roof padding forward of the seats; roll over bars to safeguard against body crushing; and special doors, double the width of conventional doors, which are hinged to fold together and swing outward, and which provide positive locking in case of a crash.

At its Boston meeting in December, 1955, the American Medical Association urged President Eisenhower to request legislation "authorizing the appointment of a national body to approve and regulate safety standards of automobile construction." Such legislation was introduced on February 20, 1957, by Sen. Lyndon Johnson, of Texas, proposing the establishment within the Department of Health, Education and Welfare of a separate division to co-operate with other public and private agencies to reduce traffic accidents.

This proposal was also cited by John D. Rogers, M.D., of Michigan, when he testified before the House Interstate and Foreign Commerce Committee's special subcommittee on traffic safety, in March, 1957. He recommended that either manufacturers get together voluntarily to place proven safety features on all cars, or Congress authorize a national body to approve and regulate safety standards of automobile construction.

* * *

A University of Michigan senior medical student was the recipient of a \$500 scholarship for research and clinical training in the field of allergic diseases. The student was Jose N. Correa of Puerto Rico, and the grant was made by the American Foundation for Allergic Diseases.

Correa will work under John M. Sheldon, M.D., concentrating on the possibility of finding fractions

(Continued on Page 1190)

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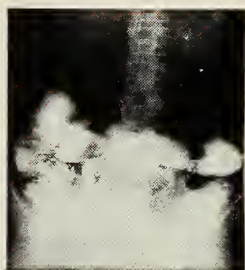
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(Continued from Page 1188)

of allergen extract which have relatively great ability to neutralize skin-sensitizing antibodies in comparison with their ability to elicit skin reactions.

* * *

The Interstate Postgraduate Medical Assembly will be held at the Palmer House, Chicago, September 30-October 3, 1957. For program, write J. Mather Pfeiffer-berger, M.D., President, Box 1109, Madison 1, Wisconsin.

* * *

A course in occupational skin problems will be presented by the University of Cincinnati Institute of Industrial Health at the Kettering Laboratory, Cincinnati, Ohio, October 28-November 1, 1957. For program, write the Secretary, Kettering Laboratory, Eden and Bethesda Avenues, Cincinnati 18, Ohio.

* * *

The fourth annual meeting of the Academy of Psychosomatic Medicine will be held October 17-19 at the Morrison Hotel, Chicago, and will be devoted to "Psychosomatic Aspects of Obstetrics, Gynecology, Endocrinology and Diseases of Metabolism." For program and information, write William S. Kroger, M.D., Secretary, 104 South Michigan Avenue, Chicago 3, Illinois.

* * *

The American College of Chest Physicians announces a postgraduate course on diseases of the chest at Hotel Knickerbocker, Chicago, October 21-26. The same

course will be repeated at the Park-Sheraton Hotel, New York City, November 11-15 and at the Ambassador Hotel, Los Angeles, December 9-13. Tuition for the course is \$75. For information and application blank, write the Executive Director of the College, 112 E. Chestnut Street, Chicago 11, Illinois.

* * *

Frederick A. Collier, M.D., Ann Arbor, retiring Chairman of the University of Michigan Medical School's Department of Surgery and Grover C. Penberthy, M.D., of Detroit, Clinical Professor of Surgery at Wayne State University, were honored at the 1957 annual Collier-Penberthy Medical Conference in Traverse City, July 25-26, a meeting originated by E. L. Thirlby, M.D., Traverse City, in 1922, which attracted a record attendance of 140 physicians this year. Dr. Alexander G. Ruthven, former University of Michigan President, spoke at the dinner-meeting on "Education." Also on the evening program was Dr. Gordon H. Scott, Dean of Wayne State University College of Medicine.

Doctor Collier stepped down as Chairman of the U. of M. Department of Surgery on July 1, after having held the position since appointment in 1930. Doctor Collier will continue to practice surgery and conduct research without "the intolerable administrative load," as he describes the directing affairs of University Hospital's most populous department. He will also continue on the medical faculty as consultant and teacher, giving a special course in the history of

(Continued on Page 1192)

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(Continued from Page 1190)

medicine which he originated many years ago. He has been with the University of Michigan thirty-seven years.

Dr. Collier will be honored by the Michigan State Medical Society at a testimonial luncheon during the Michigan Clinical Institute in Detroit, March 19, 1958.

* * *

The Michigan Chapter, American College of Surgeons, early in 1957 established a fund to assist residents in surgical training who find themselves in financial difficulties.

J. A. Witter, M.D., Detroit, Secretary of the Michigan Chapter, states that applicants are carefully screened and the money is loaned free of interest with the understanding that it will be repaid to the Fund as soon as the recipient is established in practice. In the short space of a few months, three loans have been made. This is a self-perpetuating or revolving fund. For further information, write Joseph A. Witter, M.D., 344 Glendale Avenue, Detroit 3, Michigan.

* * *

To reduce the cancer mortality rate, a nation-wide program emphasizing an annual cytologic test for uterine cancer for all women is urged by Charles S. Cameron, M.D., former Medical Director of the American Cancer Society.

"The number of deaths from uterine cervical cancer would be cut by as much as 90 per cent," Doctor Cameron states in a new 25-cent pamphlet called Cell

Examination—New Hope in Cancer, "if every woman in the country had this examination every year. This would mean an annual saving of 16,000 lives."

Cell Examination is the 252nd pamphlet in a series published by the Public Affairs Committee at 22 E. 38 Street, New York 16, N. Y.

* * *

The World Congress of Gastroenterology will be held in Washington, D. C., May 25-31, 1958, according to release received from Secretary-General H. M. Pollard, M.D., of Ann Arbor.

The official languages of the Congress will be English, French, and Spanish, rendered in simultaneous translations at the Sheraton-Park Hotel. The World Congress will hold its scientific meetings Sunday through Thursday, to be followed by the 59th Annual Scientific Session of the American Gastroenterological Association (Friday and Saturday).

Objective of the Congress is to bring together scientists from all parts of the globe who are actively contributing new knowledge and experience in the fundamental sciences or clinical behavior patterns related to disorders of the alimentary tract.

For program and complete information, write Secretary-General Pollard, University Hospital, Ann Arbor.

* * *

"Doctor—Do You Need a Medical Secretary?" That was the title of a leaflet inserted with the latest *Genesee County Medical Society Bulletin*. The flyer invited attention to a course to meet the shortage of medical

(Continued on Page 1194)



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(Continued from Page 1192)

secretaries which exists in Flint today, offered by the Flint Junior College. The lectures have the endorsement of the Genesee County Medical Society and the Genesee Medical Assistants Society. Incidentally, the slogan of the energetic Flint Junior College is "A Partner in Education."

* * *

George F. Lull, M.D., Chicago, who has served eleven years as Secretary-General Manager of the American Medical Association, has been elevated to the newly created position of Assistant to the President of the AMA. He will continue serving as Secretary, which is an elective office.

F. J. L. Blasingame, M.D., Harton, Texas, appointed by the AMA Board of Trustees to the position of General Manager, will take over his new duties January 1, 1958. Dr. Blasingame, fifty, has been active in medical affairs for many years, both at the state and national level. He served as President of the Texas Medical Association in 1955; has been a member of the AMA House of Delegates since 1949. He has maintained a teaching connection with his Alma Mater (University of Texas) since his graduation from medical school in 1928. He and his family of five children, three daughters and two sons, will move to Chicago shortly after the first of the year.

* * *

MSMS President Arch Walls, M.D., was guest of honor at the Annual Genesee County Cancer Day Program, April 17.

* * *

M.D. LOCATIONS

Through August 1, 1957

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MICHIGAN POSTGRADUATE PROGRAM IN MEDICINE

The Michigan State Medical Society, in co-operation with the University of Michigan Medical School, Wayne State University College of Medicine, and the Michigan Department of Health announces the extramural postgraduate program for the fall, 1957.

EXTRAMURAL COURSES

Alpena	November 7
Battle Creek	October 1
Bay City	November 6
Flint	October 3
Jackson	October 15
Lansing	October 29
Muskegon	October 18
Port Huron	October 1
Traverse City	November 7
Upper Peninsula:	
Escanaba	November 5
Menominee	November 6
Iron Mountain	November 7
Sault Ste. Marie	November 8
Marquette	November 5
Houghton	November 6
Ironwood	November 7

INTRAMURAL COURSES

Clinical Internal Medicine (Thursdays)

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October 3-March 13

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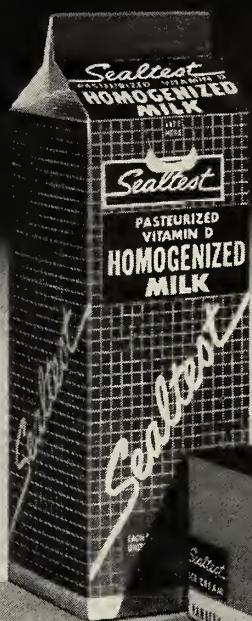
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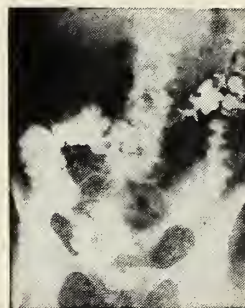
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Acknowledgments of all books received will be made in this column, and this will be deemed by us as full compensation to those sending them. A selection will be made for review, as expedient.

BOOKS RECEIVED

HEREDO-RETINOPATHIA CONGENITALIS. Mono-hybrida Recessiva Autosomalis. A Genetical-statistical Study. By Carl Henry Alstrom, Laboratory No. 2 for Human Genetics, the Psychiatric Clinic of the Caroline Institute, Stockholm. In clinical collaboration with Olof Olson, The State Institute for the Blind, Tomtebodavägen, Stockholm. Lund, Sweden, 1957.

THE EFFECTS OF THE SULFONYLUREAS AND RELATED COMPOUNDS IN EXPERIMENTAL AND CLINICAL DIABETES. Annals of the New York Academy of Sciences, Volume 71, Art. 1, Pages 1-292.

CARDIOVASCULAR DISEASES, SECTION XVIII. Excerpta Medica Foundation, 111 Kalverstraat, Amsterdam, The Netherlands. New York Academy of Medicine Building, 2 East 103 Street, New York 29, N. Y. A new monthly publication aided by a grant from the National Institutes of Health of the Department of Health, Education and Welfare. The first issue of eighty-four pages contains mostly listings, with short abstracts of 303 articles on the subject, divided into twenty chapters.

The aim of this publication is to provide a regular, up-to-date and comprehensive service of abstracts of the world literature in the field of cardiovascular diseases.

SIGNS AND SYMPTOMS. Applied Pathologic Physiology and Clinical Interpretations. Edited by Cyril Mitchell MacBryde, A.B., M.D., F.A.C.P. Associate Professor of Clinical Medicine, Washington University School of Medicine; Assistant Physician, The Barnes Hospital; Director, Metabolism and Endocrine Clinics, Washington University Clinics, St. Louis, Missouri. Third Edition, with 191 illustrations and six color plates. Philadelphia and Montreal: J. B. Lippincott Company. Price \$12.00.

Dr. MacBryde, in his third edition of Applied Pathologic Physiology of over 970 pages, has divided his subject into thirty-four chapters, using twenty-eight authors. The chapters are quite complete treatises involving definitions, physiology, medical significance, et cetera, quite an exhaustive study. The type is large, two columns and easily read. The illustrations are adequate and clear and each chapter is concluded with a liberal reference list. We like the book.

SCIENCE LOOKS AT SMOKING. A New Inquiry into the Effects of Smoking on Your Health. By Eric Northrup. Introduction by Dr. Harry S. N. Greene, Chairman, Department of Pathology, Yale University. New York: Coward-McCann, Inc., 1957. Price \$3.00.

The question of causation of lung cancer and tobacco is assuming ever greater significance. Books, even the Department of Health and the Congress, are debating the issue, with the weight probably against tobacco. This book is on the other side. The writer of the introduction, thirty-five pages of negative argument, is a Doctor of Medicine and has analyzed the evidence. The author has added 145 pages of pure argument.

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The case is interesting, and from his standpoint the author has won. He opens up many questions of what work should be done, and asks questions which others have answered, but whose answers he says are statistical only. This is another opus added to the accumulating material—is it evidence?

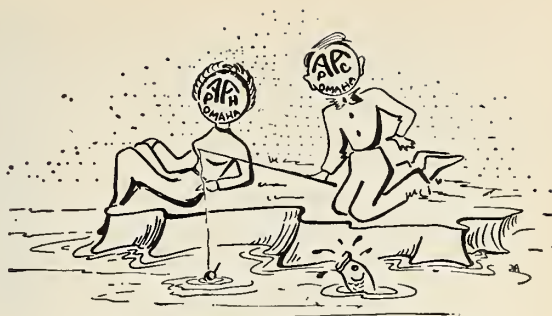
CHEMICAL TESTS FOR INTOXICATION

(Continued from Page 1130)

and at the same time protecting the moderate drinker, the recommendations of state and county medical societies could carry great weight in supporting law enforcing agencies in their endeavor to provide the protection we all need.

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13. Report of Committee on Medical Aspects of Automobile Injuries and Deaths. J.A.M.A., 163:1149-1150 (March 30) 1957.



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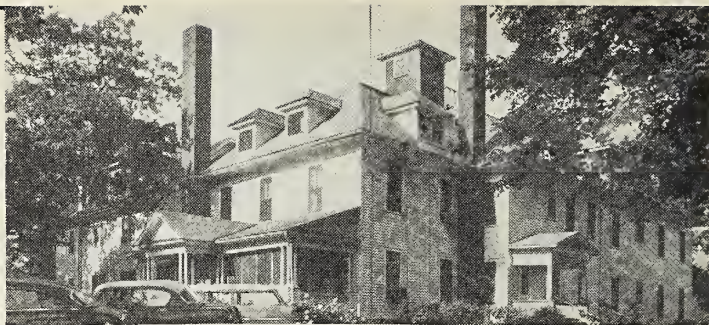
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The Child Welfare Committee sponsored the March, 1957 issue of THE JOURNAL MSMS; promoted education of law and medical students on the problem of adoption; considered the problem of prophylaxis for neonatal ophthalmia; technique of examining children's eyes; visual acuity testing equipment; continued screening clinics for hearing defects; worked on school health problems and standardized forms; initiated action toward poison control centers and accident prevention; and proposed a joint meeting of committee members and representatives of each county society to promote child welfare activities locally.

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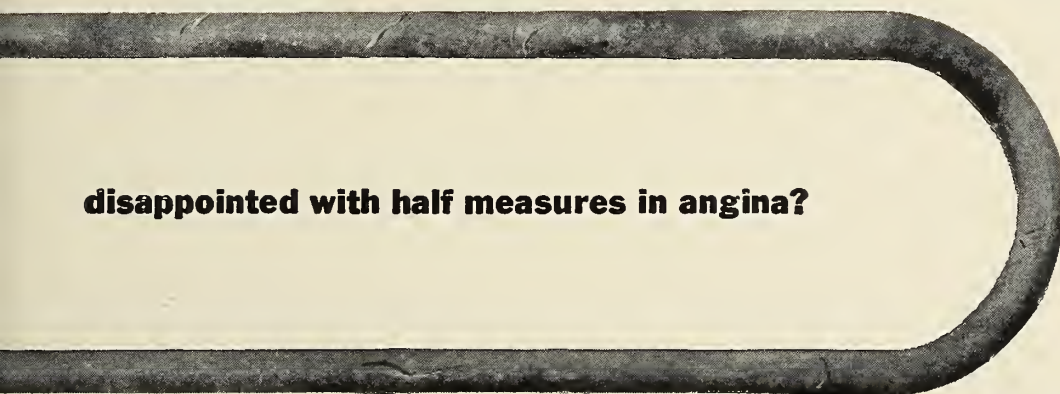
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The Michigan Clinical Institute (Detroit, March 19-20-21, 1958) and the Michigan State Medical Society Annual Session (Detroit, October 1-2-3, 1958) are "refresher" courses.

FEE-SPLITTING LAW OF THE STATE OF MICHIGAN

Section 338.53 of the Compiled Laws of 1948 as amended by Act No. 54 of the Public Acts of 1954:

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HIGHLIGHTS OF EXECUTIVE COMMITTEE OF THE COUNCIL

Meeting of August 14, 1957

- **Opinion Study of Prepaid Medical Care Coverage in Michigan.**—Up-to-the-minute progress report was presented. The sub-titles of the survey are to be (a) "Prepaid Medical Care Coverage and Related Costs Survey," (b) Survey of Consumer Opinion on Medical Care Protection," (c) "Doctor Opinion Survey on Prepaid Medical Care Plans," (d) "Survey of Related Studies on Protection Against Medical Service Fees."

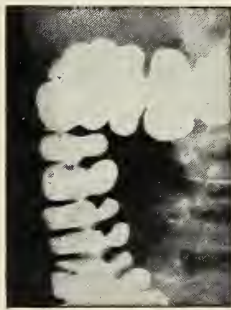
Letters of appreciation were authorized sent to

the *Lansing State Journal*, the *Detroit Times* and to Mr. Jack Pickering for cooperation in the publishing this survey.

- **Beaumont Memorial.**—The Michigan Mackinac Island State Park Commission, on July 13, approved the agreement between MSMS and the Commission, whereby the ownership of the personal property in the Beaumont Memorial has been transferred to MSMS. (This agreement was approved by MSMS July 12, 1957.) A. H. Whittaker, M.D., of Detroit, recently appointed by Governor G. Mennen Williams as a member of the Mackinac Island State Park Commission, was fittingly congratulated on this signal honor.
- **President-Elect G. W. Slagle, M.D.,** made additional appointments to 1957-58 MSMS Committees.
- **1957 Annual Session.**—Various details connected with the Annual Session, Grand Rapids, September 25-26-27 were decided.
- **Use of the MSMS addressograph** was authorized for Blue Cross (Michigan Hospital Service) to facilitate its mailing a letter in connection with creation of review committees in all hospitals as part of the continuing control program in Blue Cross cases.
- **Group Life Insurance program for MSMS Members.**—Progress report of survey, to August 12, 1957, indicated that 2,242 cards have been returned by MSMS members, with 1,399 indicating interest in a group life insurance program.
- **Co-sponsorship** by MSMS of a Seminar on "The Epidemiology, Bacteriology, and Therapy of Staphylococcus Infections in Hospitals," Lansing Civic Center, September 19, was approved.
- **Legal Counsel** reported a reactivation of hospital litigation in Oakland County (MSMS is not a party in this suit). Legal Counsel also stated that he was in the process of developing a non-profit, tax-exempt corporation to be known as the "Beaumont Memorial Foundation," as per instruction of the MSMS House of Delegates. The Executive Committee instructed that the members of the Beaumont Memorial Committee be listed as incorporators of the Beaumont Memorial Foundation.
- **History of Michigan Medical Service.**—Commenting on a recent historical item received

(Continued on Page 1210)

for a spastic gut *



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(Continued from Page 1208)

from Frederick A. Baker, M.D., of Pontiac, the Executive Committee of The Council, upon suggestion of L. Fernald Foster, M.D., President of Michigan Medical Service, authorized Editor Wilfrid Haughey and John B. Kantner (Michigan Health Council) to write an historical record of Michigan Medical Service.

- **Practice of Medicine by a Corporation.**—MSMS objection to the Michigan Hospital Service proposal to offer *medical* service to its subscribers, was discussed; The Executive Committee of The Council reaffirmed its action as expressed in its August 2nd letter of protest to Blue Cross, and authorized Legal Counsel to proceed with any necessary legal action that is feasible if out-patient (i.e., medical) care is added to contracts of Blue Cross.
- **H. Waldo Bird, M.D.**, of Ann Arbor, and **G. Thomas McKean, M.D.**, of Detroit, were added to the Committee on VA Hometown Medical Care Program, at the recommendation of Committee Chairman Wm. Bromme, M.D., of Detroit.
- **B. L. Masters, M.D.**, Chairman of MSMS Rural Medical Service Committee, was authorized to attend Rural Health Institute (sponsored by the AMA) at Purdue University, October 4-5.
- **E. H. Wiard**, long-time Executive Secretary of the Michigan Health Council, resigned as of September 1 to enter business. A letter of commendation for his significant contribution to the growth of Michigan Health Council was authorized sent to Mr. Wiard.

- **Committee Reports Presented.**—(1) Arbitration Committee, meeting July 12; (2) Committee on National Defense, July 17; (3) Scientific Radio Committee, July 17; (4) Legislative Committee, July 18; (5) Venereal Disease Control Committee, July 18; (6) Committee on Course in Medical Economics and Ethics, August 6; (7) Permanent Advisory Committee on Fees, August 7; (8) Public Relations Committee, August 11.

TWO DECADES OF HEALTH SERVICE PRICES REVIEWED

A featured special article in current (Sept. issue of *Monthly Labor Review* is an informative review of the ups and downs in consumer prices for medical care and hospital services between 1936 and 1956. Using the years 1947-49 as base, the price index for medical care at close of 1956 was highest of all major items (housing, clothing, etc.), just as it is today. But this article points out that if hospitalization is stripped out of medical care, the price increase for this item between 1936 and 1956 actually is the *smallest* of all.

In this 20-year period, hospital room rates went up 264.8 per cent, which explains why the medical care index has risen so much. At the same time, however, surgeons' fees have gone up only 59 per cent, general practitioners' fees 72.8 per cent and dentists' fees 82.1 per cent. This compares with a 220.9 per cent rise for haircuts, 135.0 for shoe repairs and 112.9 for public transportation.—WRMS, October 7, 1957.

MEDICAL MEETINGS AND CLINIC DAYS

A list of known medical meetings and clinic days, sponsored by country medical societies and other physician groups in Michigan, follows:

1957

Autumn	MSMS Postgraduate Extramural Courses	Statewide
Oct. 24-25	Michigan Cancer Conference	East Lansing
Nov. 6-7	Michigan Academy of General Practice—11th Annual Fall Postgraduate Clinic	Detroit
Dec. 3-6	AMA Clinical Session	Philadelphia

1958

Jan. 22-24	11th Annual Michigan Rural Health Conference	Ann Arbor
Jan. 29-31	Annual Meeting of the MSMS Council, Sheraton-Cadillac Hotel	Detroit
Jan. 31	MSMS County Secretaries-Public Relations Seminar, Sheraton-Cadillac Hotel	
Feb. 1-2	Hotel	Detroit
Mar. 19-21	Michigan Clinical Institute, Sheraton-Cadillac Hotel	Detroit
Spring	MSMS Postgraduate Extramural Courses	Statewide

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'Co-Deltra' or 'Co-Hydeltra' provides all the benefits of "predni-steroid" therapy and minimizes the likelihood of gastric distress which might otherwise impede therapy. They provide easier breathing—and smoother control—in bronchial asthma or stubborn respiratory allergies.

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PR REPORT

SURVEY PUBLICITY GOES TO TOWN

The powerful press enabled the Michigan State Medical Society to wind up its Opinion Study of Prepaid Medical Care Coverage in Michigan with a flood of mail revealing opinions of over 12,000 people.

Through the timely cooperation of all media, the public became aware of the need to fill out and return their questionnaires—hence, a record-breaking response to the doctor's questions!

Over 5,000 releases hit the desks of Michigan's daily and weekly editors during this four-month period of concentrated publicity.

No medium escaped the engulfing publicity of the MSMS Study. TV editors were presented with attractive cartoon slides, and good copy to run at their good will.

Radio editors were handed hard-hitting announcements—urging the public to meet the questionnaire deadline. Five, fifteen, and thirty-minute radio shows hammered out the importance of the Study to the uninformed. A half hour TV show presented an interview in action.

Secretary's Letters kept the medical society secretaries, presidents, and editors up to date on Study progress. The Woman's Auxiliary and the Michigan State Medical Assistants Society were

individually contacted by mail, informed of the Study, and enlisted to "get the doctors to return their questionnaires!"

Stories, pictures and cartoon mats felt the punch of the postage meter's tattoo as Michigan's publications heard about the Study. Organizations and associations were mailed copies of the questionnaire, suggested announcements for their group, and questionnaire request form cards.

The *Lansing State Journal* ran two-king-sized feature articles, pictures and the questionnaire. The *Detroit Times* printed the questionnaire, then relinquished choice space for an editorial and thought-provoking articles.

Announcements of the Study pierced the cork of insurance companies' bulletin boards; telegrams were dispatched to hospital staff chiefs—urging doctors to get their questionnaires in, and the Detroit State Fair saw thousands winding their way to the MSMS booth to "Watch the slide show, take a guess for a bond, and while

you're at it, take this informative material on the survey home with you!"

Here is *what* was read, seen and heard, about the MSMS Study:



Publicity Schedule for Opinion Study on Prepaid Medical Care Coverage in Michigan

May 23	Release: Announcement of the survey	372 newspapers 83 radio 13 TV
May 29	Release: Meeting of survey committee	372 newspapers 83 radio 13 TV
June 4	Release: Methods of obtaining information	372 newspapers 83 radio 13 TV
June 5	Secretary's Letter No. 191: To all presidents, secretaries and editors of component medical societies	124 people
June 10	1000-word article on study plans and progress All organizations in Michigan Health Council Directory All voting members of Michigan Health Council	372 newspapers 45
June 21	Letter to members Capital Club, enclosing article for their bulletins	50 members (representing 120,000 opinion leaders)
June 21	Release: Survey questions	372 newspapers
June 23	Release: "Lansing used as test city" (Feature)	<i>Lansing State Journal</i>

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PR REPORT

(Continued from Page 1212)

June 24	Letter to editors containing two suggested editorials and the survey timetable	372 newspapers
June 26- July 1	Release: County mailings of survey questionnaires going out; release was sent to editors of the respective counties informing them their area was due to receive mail questionnaires	372 newspapers
July 5	Secretary's Letter No. 192: To members of MSMS House of Delegates and presidents, secretaries and editors	260 officers and editors
July 7	30 minute TV show announcing the study	WJBK
July 12	Letter informing of survey and questionnaire to all Better Business Bureaus, Chambers of Commerce in Michigan	400 organizations
July 12	Article on plans of the study	<i>Women's Auxiliary Bulletin</i>
July 14	2-column editorial and questionnaire printed in full	<i>Detroit Times</i>
July 14	Questionnaire printed in full	<i>Lansing State Journal</i>
July 16	Letters to Service Clubs in Michigan, enclosing questionnaire. Suggested announcement and reply card.	750 club secretaries
July 18	Letter to Capital Club members, enclosing questionnaire	50 members (representing 120,000 top opinion leaders)
July 18	Letter to presidents of all County Medical Societies	55 presidents
July 18	Letter to secretary of each County Medical Society, with release	55 secretaries
July 19	Special story about study	<i>Medical Economics</i>
July 19	Bulletin board announcements regarding study to interested companies	60 announcements
July 19	Letter to all Michigan TV program managers from Michigan Health Council, with two slides and newscast insertion for 2-30 second spot announcements	13 TV stations
July 19	Letter to all Michigan radio program managers from Michigan Health Council with 4-30 second spot announcements.	63 radio stations
July 20	Release: To all papers in St. Joseph County re: first person to return questionnaire	6 newspapers
July 22	Release: to County Medical Society presidents	55 presidents
About July 15	Release: for use in Association publications with enclosure of survey questionnaire	340 publications
July 25	Release: Details regarding study, went out through Michigan Press	372 newspapers
July 25	Release: Feature about Study	<i>Lansing State Journal</i>
July 25	Picture of Circuit Judge Marvin Salmon of Lansing being personally interviewed	<i>Lansing State Journal</i>
July 25	Release to editors all County Medical Society bulletins	14 editors
July 26	Release: Barry Laboratories, Inc.	1 company publication
July 26	Story: Special article re: study for Bureau of Business Research, MSU.	1 publication
July 26	Mailing to officers and committee chairman of MSMS Women's Auxiliary, county and state, to inform of survey and enlist co-operation	118 officers
July 26	Mailing to all MSMS Women's Auxiliary to inform of survey and enlist co-operation	3200 members
July 29	Telegram to chiefs of hospital staff urging doctors to fill out questionnaires	200 chiefs of staff
July 29	Mailing to all members Michigan State Medical Assistant Society	800 members
July 30	15-minute "Farm and Home" radio show re: Study	WKAR radio
Aug. 1	Release: Announcing rate of returns (Michigan Press)	385 newspapers
Aug. 10	5-minute radio tape about Study—"What it means to you"	67 radio stations
Aug. 15	Release: Response and number of returns (MHC)	372 newspapers
Aug. 16	Story to all company publications and house organs in Michigan, enclosing carton mats and article	192 publications
Aug. 26	Feature article	<i>Detroit Times</i>
Aug. 29	Secretary's Letter No. 193, to presidents, secretaries, editors, all component medical societies	124 officers and editors
Aug. 30 to Sept. 8	State Fair, MSMS exhibit booth on Study	
Aug. 30	Release: Announcement of pilgrimage to Annual Session MSMS	372 newspapers
Sept. 15	30-minute radio show: Doctors Foster, Lightbody and Lichter	WJBK
Sept. 17	Release: Annual Session—Results to be revealed (Michigan Press)	385 newspapers

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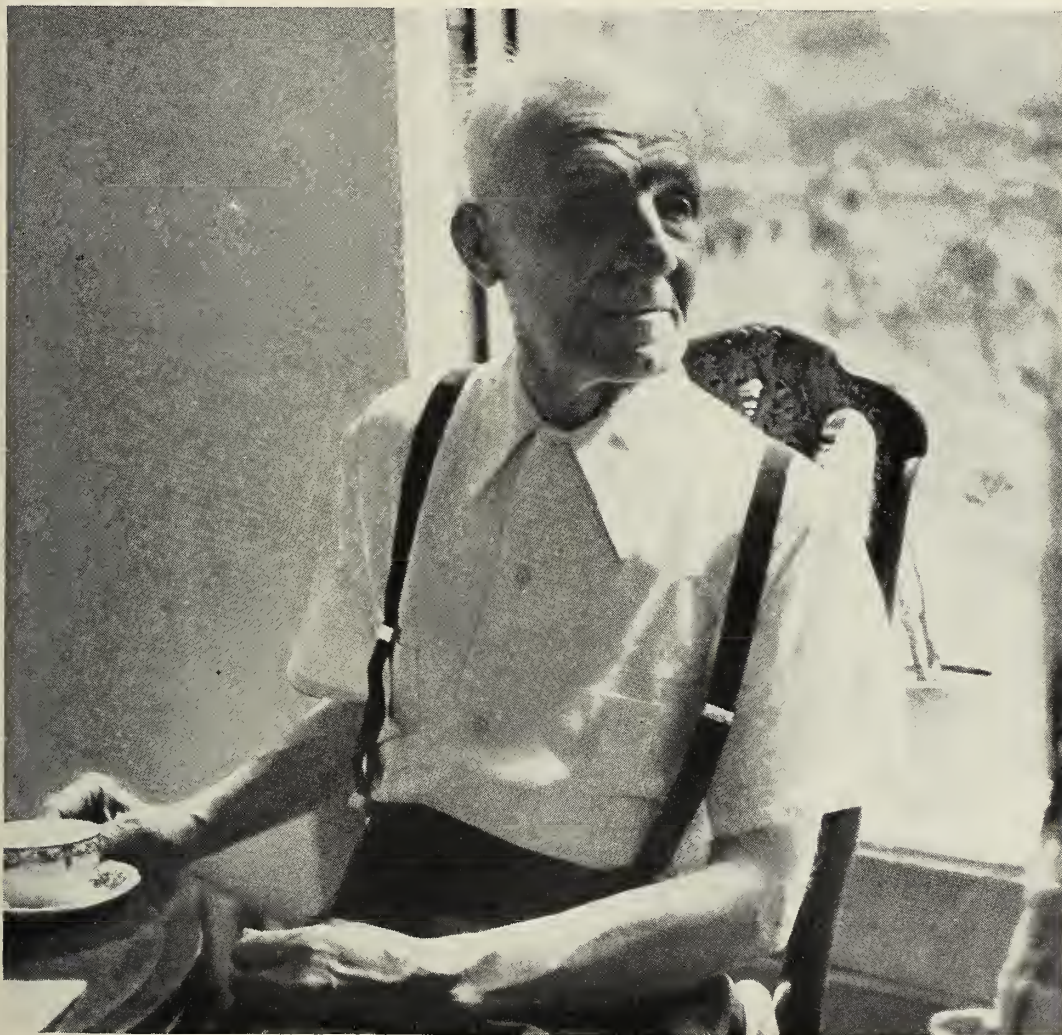
Relieves certain G.I. complaints—improved biliary and intestinal function enhance medical regimens in hepatobiliary disorders.

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AMA Washington Letter

THE MONTH IN WASHINGTON

In the last few years interest has built up in the problems of the older people—how they are to get their bills paid, how to spend their time constructively, what chronic medical conditions are causing them the most trouble. Innumerable national and local conferences have searched for ways to make life more satisfying and healthy for people entering old age, and committees are at work on the problem in thousands of communities.

In this favorable climate, when every device that might help the older citizens is being examined, there is being revived a scheme that met with no success at all when first proposed more than six years ago.

It is a plan for government-paid hospitalization under the Old Age and Survivors' Insurance system.

Here is the argument that is made for it:

People in old age generally have less income than when they were younger, but at the same time they require more medical attention and hospital care. Neither voluntary nor commercial health insurance has been able to offer these people the protection they need. The only solution, sponsors of the plan say, is to get the federal government into the picture.

Opponents of the idea agree that older people are sick more often and generally don't have much money, but they disagree violently with the other arguments. They point out that slowly but surely insurance coverage is being extended to older people at a price they can afford to pay. Most important, hospitalization-at-sixty-five critics maintain that a system like this is in effect national compulsory health insurance under Social Security.

Early this year Reps. Emanuel Celler (D., N. Y.) and John Dingell (D., Mich.) introduced bills on this subject. They would allow sixty days a year free hospitalization for OASI-covered men sixty-five and over and women sixty-two and over. Rep. Kenneth A. Roberts (D., Ala.) offered a similar bill.

Just before the session ended two developments occurred that are evidence the proponents of this system of hospitalization are getting ready to make a real fight for it next year.

First, Rep. Aime J. Forand (D., R. I.) presented a bill that would make extensive liberalizations in the social security program, including creation of a hospitalization that would give free surgical service to the aged program. Some national labor leaders immediately pledged their

support to this bill, a not unexpected move as AFL-CIO is officially behind the general idea.

Then Senator Richard L. Neuberger (D., Ogon) made it plain he, too, wanted the old people to have free in-hospital medical care. The senator said he hadn't firmed up his thoughts, but that he believed the best approach would be something like the Military Dependent Medical Care program (Medicare), making use of Blue Cross or other nonprofit groups. He estimates that a 1 per cent increase in payroll taxes for both employer and employee would meet the extra costs.

Mr. Forand, on the other hand, is specific. He would make all persons receiving OASI retirement benefits eligible and also surviving widows and children, but would not include persons receiving OASI disability payments. He would broaden the time period by allowing 120 days of hospital or nursing home care each year, with hospital stays limited to sixty days.

The Forand measure also has a provision, contained in most earlier bills, for OASI also to pay for in-hospital surgical services certified as necessary by the physician.

Mr. Forand would take no chance of running out of money. He would levy social security payroll taxes on all income up to \$6,000 (present limit \$4,200), and also increase the tax rate to half per cent for employer and employee alike and three-quarters of one per cent for the self-employed.

It is almost certain that these and other similar suggestions will receive serious consideration in Congress next year, with passage of a bill more likely than in 1951 when President Truman and Oscar Ewing first proposed the idea.

NOTES:

When Congress returns January 7, one of the measures waiting its attention will be a bill to control union welfare funds through registration and publicity. (Most funds involve medical-hospital benefits.)

* * *

Jenkins-Keogh legislation, for deferment of income taxes on money put into retirement plans by the self-employed, now is assured of a hearing next year when the House Ways and Means Committee goes into all phases of taxation.

* * *

The Atomic Energy Commission has made its 100,000th shipment of radioisotopes, many of them for medical use.

INDICATIONS:

- Rheumatoid arthritis, acute or chronic —with or without adjunctive therapy.
- Spondylitis
- Arthritis associated with lupus erythematosus or psoriasis

HOW SUPPLIED:

Aralen phosphate: 250 mg. tablets in bottles of 100 and 1000.
125 mg. tablets in bottles of 100.

Tolerance:

Aralen is usually well tolerated. Toxic effects are usually mild and to date have been transitory in nature, disappearing completely either on continuance or cessation of therapy or on reduction in dosage.

Gastrointestinal disturbances (e.g. nausea, rarely vomiting, diarrhea, abdominal cramps, anorexia) are frequent manifestations of intolerance. Temporary blurring of vision (due to interference with accommodation) is also relatively frequent.

Pleomorphic skin eruptions (e.g. lichenoid, maculopapular, purpuric), although generally mild, may preclude the use of an optimum dosage schedule. If a skin reaction persists on a reduced dosage schedule, or recurs after reinstitution of treatment with gradually increasing doses, discontinue Aralen till the lesion again disappears and consider resuming treatment with Plaquenil® (brand of hydroxychloroquine).

Less frequently transitory vertigo, headache, lassitude, or neurological disturbances, such as nervousness, irritability, emotional change, and nightmares have been reported. Instances of unexplained slight gradual weight loss as the patient's general health and arthritic condition improved have been mentioned. Occasional instances of bleaching (depigmentation) of the hair have been described.

Although an occasional instance of leukopenia, with normal differential count, has been reported (WBC about 3000), it has not proved troublesome because it has always been reversible on discontinuance, or diminution of the dose. Even spontaneous reversal may occur while full dosage is maintained.

THEORY OF ACTION:

Aralen appears to suppress or induce remission of rheumatoid inflammatory processes by inhibiting adenosinetriphosphatase.

Caution:

Aralen is known to concentrate in the liver and, although hepatic damage has never been reported, the drug should be used with caution in the presence of liver disease. In the presence of severe gastrointestinal, neurological, or blood disorders, the drug should be used with caution or not at all. If such disorders occur during the course of therapy, the drug should be discontinued. Concomitant use of gold or phenylbutazone with Aralen should be avoided because of the tendency of these agents to produce drug dermatitis.

Clinical Comments:

Of fifty patients receiving Aralen therapy, "43 have become really well; that is, they have no stiffness, and any pain that occurs can reasonably be attributed to use of joints affected by secondary degenerative changes. They have no evidence of joint inflammation, but may have a raised erythrocyte sedimentation rate. They have little or no need for analgesics."

Freedman³

"One hundred and twenty-five private patients have been carefully followed clinically and haematologically while receiving well over 200 patient-years of chloroquine [Aralen] therapy. The results are considered good in 70%, one-half of these cases being in remission. Improved work performance, sedimentation rate, and hemoglobin levels paralleled the major objective gain in this 70%. 90% of them remained on chloroquine [Aralen] therapy, half for more than two years. Classical peripheral rheumatoid arthritis, spondylitis, arthritis of juvenile onset, and rheumatoid disease with psoriasis, all appeared to respond about equally well.

"It is suggested that chloroquine comes closer to the ideal for long-term, safe, control of rheumatoid disease than any other agent now available."

Bagnall⁴

"Out of the 36 rheumatoid arthritis cases we treated . . . favorable results were obtained in 32 cases.

Bruckner et al.⁵

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AMA News Notes

AMA PLANS ELEVENTH CLINICAL MEETING

The birthplace of American independence—Philadelphia—will be the scene of the American Medical Association's 11th Clinical Meeting, December 3-6. Center of activities will be Convention Hall where scientific exhibits, color television, motion pictures, technical exhibits and scientific lectures will be presented "under one roof." Headquarters for the House of Delegates will be the Bellevue-Stratford Hotel.

Highlights of the three-and-a-half day convention geared especially for the nation's family doctors include: (1) Special transatlantic conference between distinguished physicians in London and Philadelphia on "Advances in Chemotherapy of Cancer" via two-way telephone at 3 p.m. EST Wednesday; (2) complete color television schedule of surgical demonstrations emanating from Lankenau Hospital; (3) motion picture program daily, plus a special session Tuesday evening; (4) exhibits featuring a well-rounded program and special displays on the history of medicine in the Philadelphia area, fractures and manikin demonstrations on problems of delivery; (5) panel discussions on cardiovascular disease, cancer, emotional problems of menopause, hypertension, diabetes, arthritis, traumatic injuries; (6) the General Practitioner of the Year Award to be presented by AMA to an outstanding family doctor.

AD INDUSTRY TO JOIN BATTLE AGAINST POLIO

Local polio drives will get publicity assistance this fall from the Advertising Council, Inc. This voluntary group of advertisers and businessmen has taken on the vaccine campaign as one of its public service projects, mapping out a complete promotional program which utilizes newspapers, business papers, industrial publications, transportation and outdoor advertising, as well as radio and television. Local use of these materials will, in many cases, depend on whether or not a community vaccination drive has been planned or is in progress.

Using the theme "Don't Press Your Luck—Get Your Three Polio Shots Now!", the materials make frank use of scare techniques by contrasting the tragic effects of polio with the simplicity of getting Salk shots. Advisors for the campaign were the American Medical Association, the U. S. Public Health Service and the National Foundation for Infantile Paralysis.

U. S. TO OBSERVE "MEDICAL EDUCATION WEEK" IN APRIL

The third annual Medical Education Week, nationwide tribute to the progress of American medical schools, will be promoted during the fourth week in April by U. S. medical schools and the medical profession.

April 20-26 will be devoted to an all-out effort to create a greater understanding among the public of both the achievements and the problems of medical schools. Each of the sponsoring organizations—the American

Medical Association, the Student American Medical Association, the Woman's Auxiliary to the AMA, the Association of American Medical Colleges, the American Medical Education Foundation, and the National Fund for Medical Education—is asking its membership to reserve this week for community and statewide salutes to area medical schools.

Local and state programs will be reinforced by national publicity through network television and radio, newspaper syndicates, and magazines. In addition, the sponsors will send promotional aids to their state and county officers to help in local observances.

During the 1957 Medical Education Week, medical societies in thirty-two states and woman's auxiliaries in forty-two states planned various activities, and their past successes are expected to lead to an even more widespread acknowledgment of the achievements of medical schools in 1958.

AMA PARTICIPATES IN SAFETY CONGRESS

America's doctors will again join in presenting a program this fall at the National Safety Congress in Chicago. The AMA's Council on Industrial Health will co-sponsor a session on "Vision in Industry" with the American Society of Safety Engineers and the National Safety Council's occupational health nursing section. Among the areas to be covered in the discussion of eye safety programs are visual ability to meet job requirements, eye protection, and proper first aid for eye injuries. This program will be held Thursday morning, October 24, at the Congress Hotel.

AMA PREPARES LIABILITY KITS

For us in claims prevention and claims review programs, the American Medical Association's Law Department is making available to each state medical society a packet of materials dealing with "medical professional liability." The kit will contain reprints from the *Journal of the American Medical Association* "Medicine and the Law" section dealing with such things as statutes of limitation, court decisions and "*res ipsa loquitur*." Also enclosed will be the results of an opinion survey and a report on medical professional liability case histories, keyed to each state. Distribution is slated for October 1.

M.D.'s TO CO-OPERATE IN "FARM-CITY WEEK"

The national committee for Farm-City Week, November 22-28, has extended a special invitation to all state and county medical societies to join in a program to "build better relationships between town and country neighbors." As in the past two years, this observance will be conducted nationally and locally by hundreds of civic, industrial, agricultural, professional and youth organizations—all spearheaded and coordinated by Kiwanis International.

The AMA, which is represented on the Farm-City

(Continued on Page 1224)

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overgrowth
is a factor

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ACHROSTATIN V combines ACHROMYCIN† V . . .
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outstanding effectiveness against more than
50 different infections . . . and NYSTATIN . . . the
antifungal specific. ACHROSTATIN V provides
particularly effective therapy for those
patients who are prone to monilial overgrowth
during a protracted course
of antibiotic treatment.

supplied:

ACHROSTATIN V CAPSULES
contain 250 mg. tetracycline
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units Nystatin.

dosage:

Basic oral dosage (6-7 mg.
per lb. body weight per day)
in the average adult is
4 capsules of ACHROSTATIN V
per day, equivalent to
1 Gm. of ACHROMYCIN V.

*Trademark

†Reg. U. S. Pat. Off.

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M.D.'S TO CO-OPERATE IN "FARM-CITY WEEK"

(Continued from Page 1222)

board of directors, this month (October) will send to all societies a series of suggestions for highlighting their urban and rural health services during the Week. In most cases, local programs will be coordinated by community Kiwanis clubs. Names of both regional and state Farm-City Week chairmen also will be sent to medical societies so that physicians may be represented on the local planning committees.

THREE NEW AMA EXHIBITS

Three new exhibits previewed at the American Medical Association's 1957 Public Relations Institute in Chicago, August 28-29, will be available for bookings by state and county medical societies in September.

(1) "Digestion"—shows the organs involved in digestion, the passage of food through the body, the mechanics of swallowing, the action of the stomach and intestines, and the body's absorption of food. (2) "Alcoholism Is Your Business"—(for professional audiences) gives the viewer an opportunity to eavesdrop on a conversation between a distraught spouse and the family physician over the treatment of alcoholism. (3) "Organs of the Human Body"—three dimensional models of the torso show location of various organs in the body and their functions.

Further information on these displays may be secured from the AMA Bureau of Exhibits.

AMA TO PUBLISH MEDICOLEGAL MATERIAL

To guide physicians and hospitals in the selection of appropriate medicolegal forms, the AMA's Law Department has compiled a series of six brief articles for the *Journal of the AMA*. These articles will appear weekly in the *Journal*, beginning about September 1. In addition, the Law Department will publish a booklet encompassing the material plus case citations and legal analysis for distribution about October 1.

Chief purpose of this material will be to provide up-to-date information and miscellaneous medicolegal forms which physicians and their attorneys may adapt for their own needs. Subjects to be covered: (1) consent to operations and other medical procedures; (2) patient's right to privacy; (3) confidential communications and records; (4) artificial insemination; (5) the physician-patient relationship; (6) autopsy.

In all cases, the Law Department strongly advises doctors to seek competent legal advice locally.

AMA LENDS HAND TO MEDICAL ASSISTANTS GROUPS

A new how-to-do-it organizational manual for medical assistants will be introduced at the second national convention of the American Association of Medical Assistants in San Francisco, October 4-6. Edited by leaders in assistants groups around the country, the manual is being published by the AMA's Public Relations Department. The manual, titled "Take-off Techniques," discusses such organizational processes as securing medical

society cooperation, planning educational programs and keeping members informed.

This is the second publication for medical assistants the AMA has prepared this fall. A new medical assistants packet, outlining medical assistants' organizational aims and activities, was completed recently and is available on request to medical societies and assistants groups.

Women from assistants groups in some twenty states are expected to attend the San Francisco session of AAMA. The San Francisco Medical Society, the California Medical Association and the AMA will co-sponsor a reception Friday evening, October 4, for AAMA members.

AMA CONFERENCE ON NUTRITION IN PREGNANCY

Because nutrition plays such an important role in all phases of reproduction, the AMA's Council on Food and Nutrition has selected "Nutrition in Pregnancy" as the title of its 1957 symposium. The meeting will be held October 11 at the University of Missouri Medical Center, Columbia, Missouri. Joint sponsors with the AMA are the University of Missouri Medical School and Adult Education and Extension Service and the Boone County Medical Society.

The symposium will provide an excellent opportunity for physicians, nutritionists, dietitians, nurses and others to acquaint themselves with current findings in nutrition and the practical application of these findings to the management of obstetrical patients.

Topics to be discussed include: the influence of maternal nutritional level on the fetus and infant; metabolic and biochemical changes in normal pregnancy; importance of nutritional state of mother prior to conception; nutrition experiments as an instrument of teratologic research; the effect of the reproductive cycle on nutritional status and requirements; dietary habits during pregnancy; panel discussion to review epidemiologic studies.

If physicians and patients alike maintain a high index of suspicion, and if all available diagnostic procedures are utilized, many more cases of esophageal and gastric cancer will undoubtedly be uncovered while still in a stage permitting curative operation.

* * *

The great pitfall in cytologic examination is the false negative result. A negative cytologic study does not exclude the diagnosis of cancer.

* * *

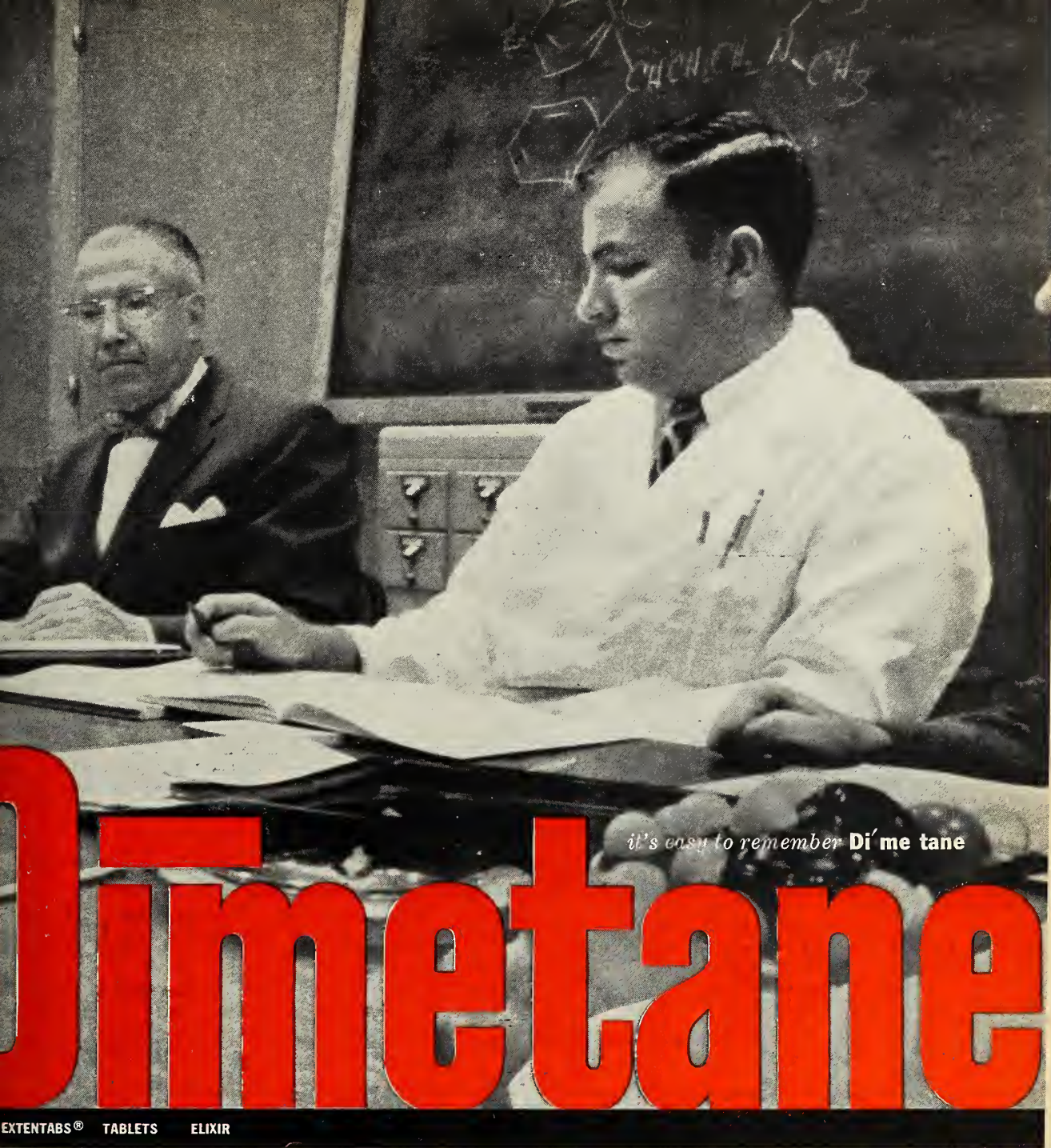
There is no single characteristic onset or symptom complex in the earliest expressive stage of gastric cancer.

* * *

Any symptom referable to the upper abdomen may be a symptom of cancer of the stomach.

* * *

Approximately one-third of all patients with gastric cancer may present symptoms of peptic ulcer.

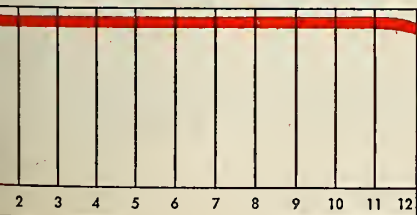


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Social Security and Jenkins-Keogh Bills

Actions of the AMA House of Delegates at its June, 1957 annual meeting on these subjects were as follows:

No. 23. Resolution on Postponement of Income Tax Payments

1238

The following resolution was introduced by Dr. James E. Feldmayer on behalf of the California delegation and was referred to the Reference Committee on Insurance and Medical Service:

WHEREAS, The California Medical Association has declared itself in favor of the U. S. House of Representatives Resolutions 9 and 10 permitting postponement of payment of income tax on certain sums earned by self-employed persons, known as the Reed-Keogh bills; now, therefore be it

Resolved, That the California Medical Association does urge the American Medical Association to continue its strenuous efforts toward the passage of this or similar legislation.

REPORT OF REFERENCE COMMITTEE ON INSURANCE AND MEDICAL SERVICE

Dr. James P. Hammond, Chairman, Vermont, read the following report, which was adopted:

Resolutions No. 23, 40, and 57 on the Jenkins-Keogh Bills.—The subject matter of these resolutions is identical, and the purpose of all of them is to endorse the Jenkins-Keogh bills. Your committee recommends that they be adopted.

1243

No. 39. Resolutions on Social Security Benefits

Dr. Christopher Wood for the New York delegation introduced the following resolutions, which were referred to the Reference Committee on Legislation and Public Relations:

WHEREAS, 70 million Americans are currently eligible for retirement and survivors benefits under the Federal Social Security system; and

WHEREAS, Congress amended the Social Security Act in 1954 and 1956 bringing self-employed professionals, such as dentists, lawyers, pharmacists, social workers, engineers, and others, the benefits of Old-Age and Survivor's Insurance; and

WHEREAS, Doctors of medicine are now the sole self-employed professional group excluded; and

WHEREAS, Because of this unfair exclusion physicians must pay \$7,000 to \$25,000 more for retirement and life insurance than other citizens; and

WHEREAS, There is no logical or professional reason why practicing physicians should be denied benefits available to millions of other Americans; and

WHEREAS, Congress has passed bills whereby no voluntary coverage will be granted physicians; therefore be it

Resolved, That the American Medical Association rescinds its opposition to compulsory social security for doctors of medicine; and be it further

Resolved, That we urge the Congress of the United States of America to extend the benefits of social security to self-employed doctors of medicine; and be it further

Resolved, That the President of the United States of America, the presiding officer of the Senate, the Speaker of the House of Representatives, and members of appropriate congressional committees be sent copies of this resolution.

1230

REPORT OF REFERENCE COMMITTEE ON LEGISLATION AND PUBLIC RELATIONS

Dr. S. J. McClendon, Chairman, California, read the following report which was adopted:

Resolutions No. 39 and 46 on Compulsory Social Security Coverage for Physicians.—Your committee heard a number of persons relative to these resolutions, and makes the following recommendations:

That the House of Delegates reaffirm its long-standing opposition to the compulsory coverage of physicians under the Old-Age and Survivors Insurance provisions of the Social Security Act. It recommends a strongly stepped-up informational program of education which will reach every member of the Association, explaining the reasons underlying the position of the House of Delegates on this issue.

Physicians and medical societies have for many years led the fight against federal encroachments in their personal and private affairs. The pattern of social insurance schemes in other countries growing from retirement payments to survivorship payments to permanent and total disability payments to temporary cash sickness benefits and, finally, to national compulsory health insurance, is all too clear. It is equally clear that greater federal control and the placing of responsibility for an increasingly greater percentage of our people in the hands of the government will result in loss of freedoms impossible to reclaim. For these reasons, and because of the actuarial instability of the Old-Age and Survivors Insurance program, your reference committee recommends that these resolutions be not adopted.

The Association's position favoring the Jenkins-Keogh bills is a more logical approach, as it encourages thrift and discourages inflation and dependence upon the federal government.

No. 40. Resolution on Participation of Physicians in Pension Plan for Self-Employed

The following resolution was introduced by Dr. Edward P. Flood on behalf of the New York delegation and was referred to the Reference Committee on Legislation and Public Relations:

WHEREAS, It is desirable for physicians to receive tax-free pension rights; and

WHEREAS, Participation in such plans (Jenkins-Keogh bill) would not negate our participation in the Federal Social Security program; and

WHEREAS, Such participation would permit a self-employed physician to put part of his earnings before taxes into a retirement fund; therefore be it

Resolved, That the American Medical Association approves participation of its members in such a pension plan for the self-employed.

NOTE: The report of the Reference Committee on Legislation and Public Relations on Resolution No. 41 will be found following Resolution No. 23.

No. 46. Resolution on Compulsory Social Security Coverage for Physicians

The following resolution was introduced by Dr. John N. Gallivan on behalf of the Connecticut delegation and was referred to the Reference Committee on Legislation and Public Relations:

(Continued on Page 1232)

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JMSM

Asian Strain Influenza Vaccine



In keeping with its tradition of responding to the immediate needs of the medical profession, Lederle announces the availability of "Influenza Virus Vaccine-Monovalent, Type A Asian Strain," produced according to N.I.H. specifications.

The vaccine is specific against the known strains of the so-called "Far East Influenza" virus, and is supplied in a 10 immunization (10 cc.) vial. Every effort will be made to fulfill your requirements.

LEDERLE LABORATORIES DIVISION, AMERICAN CYANAMID COMPANY, PEARL RIVER, NEW YORK

(Continued from Page 1230)

WHEREAS, The Connecticut State Medical Society conducted a referendum among its 3,100 members during March and April of 1957 asking for a statement of opinion relative to the compulsory inclusion of doctors of medicine under Old-Age and Survivors Insurance in the Social Security Law; and

WHEREAS, 61 per cent of the members of the society voted in this referendum and 73 per cent of them were in favor of compulsory inclusion of doctors of medicine under the Social Security Law (which was 45 per cent of the total ballots distributed); and

WHEREAS, The House of Delegates of the Connecticut State Medical Society at its 165th annual meeting on April 30, 1957, directed the delegates from the society to the American Medical Association to present and support at the next meeting of the House of Delegates of the American Medical Association in New York City, June, 1957, a resolution sponsored by the Connecticut State Medical Society, favoring social security coverage for all physicians; now therefore be it

Resolved, That the House of Delegates of the American Medical Association assembled at its Annual Meeting in June, 1957, place itself on record as being in favor of compulsory inclusion of doctors of medicine under the Federal Social Security Law.

NOTE: The report of the Reference Committee on Legislation and Public Relations on Resolution No. 46 will be found following Resolution No. 39.

1248

No. 57. Resolutions Supporting the Jenkins-Keogh Bills

Dr. John K. Glen for the Texas delegation introduced the following resolutions, which were referred to the Reference Committee on Legislation and Public Relations:

WHEREAS, The legislation now pending in Congress, generally known as the Jenkins-Keogh bills, which would permit those with self-employment income to place a small part of their earnings before taxes into a retirement fund; and

WHEREAS, More widespread interest and support for the Jenkins-Keogh legislation is evident now than ever before, therefore be it

Resolved, That the House of Delegates of the American Medical Association again endorses the principles of the Jenkins-Keogh bills in the interest of fairness and equality to the self-employed individuals of the United States; and be it further

Resolved, That copies of this resolution be sent to the President, all members of his Cabinet, and all members of the Congress.

1251

No. 69. Resolutions on Nationwide Referendum on Social Security

Dr. Stanley Weld for the Connecticut State Medical Society introduced the following resolutions, which were referred to the Reference Committee on Legislation and Public Relations:

WHEREAS, The burning question of social security still confronts the physicians of the United States; and

WHEREAS, According to the statement of Frank G. Dickinson, Ph.D., Director, A.M.A. Bureau of Medical Economic Research, in *The Journal*, July 21, 1956, page 1163: "Unfortunately the use of a variety of questions in the state association polls makes a tabulation of the composite replies from all polls, particularly on the com-

pulsory versus voluntary issue, meaningless"; therefore be it

Resolved, That the Secretary of the A.M.A. be instructed and empowered to conduct a nationwide referendum of the members of the A.M.A. on the issue of social security for self-employed physicians; and be it further

Resolved, That to obviate the confusion resulting from the statewide polls, the questions presented in the proposed referendum be phrased simply as follows:

I favor social security for physicians.

I do not favor social security for physicians.

and be it further

Resolved, That the referendum be preceded by the publication in *The Journal* of factual briefs for and against social security and that the same factual briefs shall also accompany the referendum ballots.

REPORT OF REFERENCE COMMITTEE ON LEGISLATION AND PUBLIC RELATIONS

Dr. S. J. McClendon, Chairman, California, read the following report, which was adopted:

Resolution No. 69 on Nationwide Referendum on Social Security.—Your committee met for two hours and listened to discussions for and against this resolution.

In its report on Resolutions No. 39 and 46, your committee has recommended "a strongly stepped-up informational program of education which will reach every member of the Association, explaining the reasons underlying the position of the House of Delegates on this issue."

From the discussions at the open hearing, it was obvious that such a program was necessary, and that until such a program is effected, your committee recommends that the resolution be not adopted.—JAMA, July 13, 1956.

Laboratory Examinations Tissue Diagnosis

Allergy Tests	Hematology
Autopsies	Papanicolaou Stain
Bacteriology	Pregnancy Tests
Basal Metabolism	Protein Bound Iodine
Chemistry	Urinalysis
Electrocardiograms	
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NUMBER 10

The Kaleidoscopic Nature of Psyche and Soma

By Peter A. Martin, M.D.
Detroit, Michigan

THE TERM "psychokaleidoscops" was coined by the author for this paper, in an attempt to emphasize the constantly changing combinations (like a kaleidoscope), of psyche and soma within each patient. Confusion as to how psyche and soma are related is not uncommon in medical practice. Psychiatrists frequently encounter two extreme attitudes in their nonpsychiatric colleagues. One is the attitude in which, in the absence of positive physical and laboratory findings, the patient is told by his physician that there is nothing organically wrong with him, so he must be neurotic and he is referred to a psychiatrist. This is an erroneous method of diagnosis of a neurosis by the exclusion of physical findings. The other attitude is a newer one, but one that is encountered with surprising frequency and appears to be a misguided offspring of the rising emphasis on psychosomatic medicine. It erroneously concludes that psyche and soma should always be considered as one, and thus *every* somatic illness is either partially or wholly due to psychologic forces. This view may result in a referral to a psychiatrist for total care of a patient even in the face of proven organic findings of a nonpsychiatric nature. As will be illustrated in the clinical material which follows, one-sided viewpoints can place the patient in a dangerous position.

Pertinent clinical material will be presented from the case histories of several patients. This

material illustrates the kaleidoscopic nature of the human organism, and leads to conclusions about the danger not only of oversimplification of the relationship between psyche and soma but, also, the danger of complacency after establishing the relationship in a particular patient, in believing that it will continue thereafter unchanged.

Case Reports

Case 1.—The first case is that of a twenty-eight-year-old white man who was transferred from the psychiatric section of a general hospital to the state hospital with a diagnosis of schizophrenia. His previous medical history was one of periodic episodes of vomiting for a duration of five years. During these episodes, he was unable to "hold anything on his stomach." According to the informant, no one was ever able to determine what was physically wrong with him. His last attack, which began with persistent vomiting and epigastric pains, forced admission to the general hospital. At the time of admission he was described as a person having many friends, being very sociable and always liked by people.

This patient was kept on the medical service for three-and-a-half months and given an intensive medical work-up to determine the cause of his pain and vomiting. His case record was thick with laboratory reports. The following is a very brief summary of his chart after months of hospitalization:

History on Admission: Persistent vomiting for one week—epigastric pain. No response to medical treatment. *Physical Findings:* Essentially negative. *Laboratory Findings:* Essentially negative. *X-Ray Findings:* GI series—No cancer, ulcer or vitamin deficiency. Steer horn stomach and possible gastritis. Barium enema—no pathology shown. IV pyelogram—no pathology shown. *Gastroscopic:* poor emptying stomach—hypersecretion. Possible hypertrophic gastritis, pylorospasm or

Read at a meeting of The Michigan Society of Neurology and Psychiatry, Detroit, Michigan, March 21, 1957.

OCTOBER, 1957

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pyloric stenosis. *Treatment:* Patient received atropine, phenobarbital, tincture belladonna, I.V. fluids, and vitamins. He showed no response to treatment and became progressively more depressed, withdrawn and resentful when told nothing was wrong with him.

Remarks: "Patient completely washed up on medical service. Variety of drugs tried with no success."

Final Diagnosis: Vomiting—psychogenic in origin. Depressive state.

Because of the foregoing picture, he was presented at the psychosomatic seminar which was headed by a psychiatrist. There, a tentative diagnosis of schizophrenia was made and a recommendation that he be transferred to the psychopathic wards. Following his transfer, he became more depressed and then frankly psychotic. He refused to talk to anyone for three weeks and, when asked why, told his sister that he thought his mouth got him into trouble. He attempted suicide because he was told that his vomiting was all in his mind. He then developed a mood change to one of excitement, in which he was very happy, cried, and believed that he would leave the hospital entirely well. These alternating moods of depression and excitement finally resulted in his commitment to the state hospital. His family did not believe there was anything mentally wrong with this patient and resented his hospitalization.

When admitted to the state hospital, he was despondent, apathetic, confused and disoriented. This picture, coupled with the extensive physical work-up he had recently had and his transfer diagnosis, caused him to be placed on electroshock therapy. He showed no response and continued his vomiting between such treatments. A steady downhill course necessitated sending him to the hospital ward where he expired six weeks after admission to the state hospital and fifteen days after his last shock treatment.

Following are the pertinent sections of the autopsy report: "The stomach, after evacuation of the contents, measures 29x16x2 cm. At the duodenal cap, 2 cm. from the pyloric ring, there is an old scar from an old peptic ulcer. This appears to be what has produced the chronic obstruction. There is no suggestion of malignancy and the stomach appears to be in fairly good condition except for the enormous distention. There is no evidence of active ulceration. The hepatic duct is involved in the scar tissue. . . . Cause of death: pyloric obstruction."

Careful re-examination of the entire case history of this patient led to these conclusions. The underlying schizophrenic potential broke through under the stress of his disheartening prolonged hospitalization. If surgical intervention had taken place, both his psychosis and his death could have been prevented. This man died because of the lack of recognition of these principles: (a) Referral from competent medical men does not rule out organic illness. There is an increasing collection of literature to verify this conclusion.

(b) The presence of obvious mental illness does not prove it to be the cause of any physical symptoms present. The psychotic picture was accepted as explanation for his vomiting. His symptom complex was considered to be a psychosomatic one. Actually the preterminal picture was a somatopsychic one.

Case 2.—This patient was a fifty-five-year-old white woman brought to the hospital from another mental hospital where she had just received seventeen electroshock treatments. Her diagnosis was paranoid schizophrenia. She still had auditory hallucinations with paranoid delusions on admission. In addition, this picture was complicated by the marked type of confusion which often accompanies electroshock. The psychiatrist's admission examination indicated necessity for a further intensive physical work-up. A referral to an internist consultant resulted in the diagnosis of myxedema, mixed with multiple gland deficiency. Subsequent inquiries into previous medical illnesses revealed that the history of previous recognition of this organic pathology had been ignored by the psychiatrist who gave her shock therapy. Her basal metabolic rate was -21. Stomach contents revealed an achlorhydria. The internist consultant placed her on thyroid, pituitary extract, lexitron and acidulin. The daily change, though gradual, was dramatic. The psychosis cleared up as her physical condition improved. She was discharged in four weeks after onset of medication.

The second patient like the first had an underlying psychotic potential. The paranoid psychosis broke through with the organic trauma of the severe hypoadocrinism. The hypoadocrinism precipitated but did not cause the psychosis. The psychosis did not cause the hypoadocrinism. These mutually exclusive entities were interrelated, but not as cause and effect. In the presence of malfunction of physiologic activities, healthy ego defenses failed.

Case 3.—The third patient in this series was a forty-seven-year-old white woman who was admitted to the hospital where her husband had undergone serious abdominal surgery. She was described as having made a nuisance of herself at the hospital by doubting the efficiency of the nurses and the doctors and fearing her husband would die. For this reason, and in order to prevent disturbing the husband's convalescence at home, his surgeon sent her to the private mental hospital for observation. A careful psychiatric evaluation revealed considerable stress at home but, on the basis of the examination, the psychiatrist could positively state that she was neither psychotic nor neurotic. Her medical history and examination indicated some physical disorder present and she was referred to the consulting internist. Following is a portion of the initial report: "From the clinical standpoint, she has a chronic bronchitis and possibly a chronic cholecystitis. I would

commend a gall bladder series for the latter. There is no explanation for the high leukocytosis (17,000) at present." Chest and gall bladder x-rays were negative. Leukocytosis persisted despite a course of penicillin. The consultant then ordered a gastrointestinal series, which revealed a questionable lesion in the stomach. She was then referred to her own internist for definitive action. He ridiculed the need for surgery. The psychiatric team, then, had to insist upon gastroscopy. Through the latter procedure, a small sessile polyp was visualized. The psychiatric team insisted on surgery, despite objections of her internist as to the benign nature of the lesion. This resulted in partial gastric resection and posterior gastrojejunostomy. Portions of the biopsy report follow: "The biopsy of the gastric mucosa shows marked lymphocytic and plasma cell infiltration with some polynuclears. There are areas of atypical glandular hyperplasia with mucin formation. In some areas this appears to be a small benign adenoma but where there is evidence of infiltration, the tumor is evidently an early adenocarcinoma arising from aberrant tissue."

This paper is written eight years after surgery and the patient has been in good health, both physically and mentally up to the date of this follow-up study. An eight-year cancer cure of the stomach has been achieved. A psychiatrist's diagnosis of no mental illness has been confirmed.

Case 4.—The fourth case is that of a middle-aged man who suffered from severe frontal headaches for many years. He had repeated medical examinations but no cause for his headaches was discovered. At one large medical center, he was finally scheduled to be examined by a psychiatrist. There, after a half hour of questioning, he found himself denying the psychiatrist's repeated allegations that his headaches were due to his hatred against his father. Finally the psychiatrist heatedly said, "How can you say you don't hate your father when you told me he was a beggar?" In horror, the patient who spoke with a New York accent explained to the mid-western psychiatrist that he had said his father was "baker" and not a "beggar." His headaches continued unabated by this interview.

The patient's wife was a person who had phobic reaction to doctors. So, when his wife had to see an ear, nose and throat specialist, he said he would go and be examined first in order to get her to the doctor, and

also in a vain search for relief from his headaches. Upon examination, he was told that nothing was wrong with him except for a slightly deviated septum, but that his wife needed immediate surgery for nasal polyps. In order to overcome her neurotic fear, he offered to go into the hospital for surgery on his deviated septum at the same time as she would have her polyp surgery. At his operation, when the nasal septum deviation was removed, a large soft tissue tumor occupying the frontal sinus was exposed and removed in its entirety. His headaches disappeared forever after this surgery. However, his wife complained for weeks after surgery about pain and discomfort in her nose. The surgeon said that he could find no reason for it, that surgery had been successful and it must be an emotional reaction in this neurotic woman. Fortunately, her symptoms disappeared a few days later when a nasal pack which had been left in at surgery dropped out unexpectedly.

The shifting conditions of psyche and soma are clearly illustrated in this last case history. These kaleidoscopic pictures need frequent reviewing in order to see what changes have taken place. Oversimplification or one-sided viewpoints are dangerous to the patient. It would take a mathematician to work out the number of combinations of psyche and soma that the physician should look for. Just a few will be listed here: (1) A somatic illness with minimal, mild, or moderate or severe emotional reactions to it; (2) an emotional illness with minimal, mild, moderate or severe physiological reaction to it; (3) a somatic illness and an emotional illness present at the same time but not related as to cause and effect; (4) an emotional conflict leading to an organic illness which leads to the development of an emotional illness not directly related to the original emotional conflict.

Summary

The author has attempted to illustrate clinically a few of the many varying relationships between psyche and soma which may occur in any patient. It emphasizes the need for continuing evaluations of these relationships in all patients.

Forty per cent of patients complaining of postmenopausal bleeding have cervical carcinoma.

* * *

The treatment of cervical cancer is largely irradiation therapy and should be given in centers properly equipped to give radium and deep x-ray therapy.

The treatment of endometrial carcinoma is a combination of irradiation and surgery.

* * *

Bleeding should never be ascribed to a benign cause, such as a cervical polyp, until curettement has ruled out endometrial carcinoma.

Clinical Manifestations of Anxiety

By Peter A. Martin, M.D.
Detroit, Michigan

THIS paper will be directed primarily to the presentation of the clinical manifestations of anxiety; however, to avoid the lack of understanding that results from pure description, theoretical assumption will be continuously interspersed. We will start with the picture of the fetus *in utero*. In this veritable paradise, the fetus is subjected to a minimum of stimuli, a minimum of activity, and a minimum of unpleasure. But at birth a marked change occurs. Paradise is lost. Instinctual needs are no longer being automatically and continuously gratified. The newborn is introduced to loud noises, bright lights, and to the need to breathe for itself and to actively participate in its own nourishment. At birth we can observe the muscles of the infant's face contorted, as if in pain, we can observe undirected muscular discharges in the extremities and we can hear his disturbed cries. What we are seeing is a disruption of homeostasis. This is a diffuse dystonic reaction to a disturbance of inner equilibrium. Subsequently, a similar total and overwhelming reaction involving the entire organism occurs whenever an infant's homeostasis is disturbed by intense hunger, thirst, inner discomfort or outside stimuli that interfere with its balance. We cannot know directly what the precise qualities of the emotion experienced by the infant are at this time. However, we can say that at this early stage, the infant experiences unpleasure due to a mixture of several affects, prominent among which is the forerunner of anxiety.

Let us carry the infant a step further. Let us suppose he has succeeded in mastering the art of nursing. He has experienced the gratification and satisfaction of his hunger pains, the change from unpleasure to pleasure. His stomach does not know that mother has been instructed to place the infant on a rigid four-hour feeding schedule. His pangs of hunger may become severe in three hours. During the one hour's wait until mother

feeds him, he experiences an accumulation of unpleasant stimuli against which he is powerless. Manifestations of anxiety develop in response to being so overwhelmed. The establishment of anxiety results from the infant's biologic and psychologic inability to cope on his own with the increase of tension arising from nongratification of his needs. This disturbance of homeostasis is experienced as a threat to his existence and, in reality, this is so. If uncared for, the human newborn dies.

As the growing infant's experiences increase, and his other ego functions develop, such as memory and sensory perception, the child becomes able to predict or anticipate that a state of unpleasure will develop. For example, his first pangs of hunger at the three-hour mark, though mild may be a signal to touch off a severe reaction in anticipation of a repetition of previous severe discomfort.

We can now define anxiety as it will be used throughout this presentation. Anxiety is an unpleasant emotion or affect which is evoked by the anticipation of danger. It serves a function of being a signal of trouble to come, trouble to the extent of possible annihilation. But anxiety is not only a psychic phenomenon. There are, as mentioned, physiological expressions which are adrenosympathetic. These *anxiety* equivalents are characterized by an increase in the cardiac and respiratory rates, and by gastrointestinal hypermotility, by a rise in blood pressure and changes in the vascular system throughout the body. The physiologic discharge phenomena form a syndrome which can be studied objectively and which is constant from individual to individual. These visceral responses change very little after birth except that they acquire a somewhat favored localization in one system of organs. One person may react more intensely by cardiovascular, another by gastrointestinal, and a third by respiratory system reactions. Chronic effects of anxiety form the basis of so-called psychosomatic conditions. Probably the localization is due to an infantile trauma

Presented before students and faculty, Wayne State University College of Medicine, Detroit, Michigan, February, 1957.

and fixation, with some hereditary factor.

In the adult, the cardinal feature of anxiety is its vagueness. This quality characterizes both its affective or feeling aspect and its expressive aspects. The *affect of anxiety* is perceived as an uneasiness of varying degrees of painfulness and pressure, together with a quality of uncertain foreboding. The expression of anxiety includes diffuse activity from mild excitement to extreme restlessness. But, like its affect, the activity is objectless and undirected. Extraordinarily alert and expectant, the anxious individual is ready to adapt to changes in the outer situation.

The wide range of responses to anxiety is well known. For example, mild anxiety is felt in reading stirring passages of a book, or just before the trigger is pulled in hunting. At such times, the person is on the alert, with no definite purpose other than the most general one of being ready for anything. Similar reactions, but with greater urgency and restlessness, occur in more disturbing situations. Extreme degrees of anxiety, apparently out of proportion to the external stimulus, occur among neurotic and psychotic individuals. Normal individuals, under marked stress, as in war, can experience regression to extreme anxiety. This may appear when the stimulus is great, sudden and overwhelming. A sudden exposure to great danger catches the organism unaware and unprepared. The widespread diffuse paralyzing reaction of disorganization is known as shock or panic. Rational conduct is paralyzed; fragmentation and shattering of habitual reactions occur and there is regression to infantile reactions. The individual is said to "lose his head" or "go to pieces." Inhibitory learned processes are detached and the person says and does things that under normal circumstances he would avoid. Prolonged states of anxiety may occur in continuously difficult situations which cannot be resolved, such as the maladjustment of some men in military service. Free-floating anxiety with no apparent cause results from unconscious conflicts.

The above description gives the more obvious manifestations of anxiety. There are also hidden manifestations of anxiety as seen in the character of an individual. To illustrate the latter, let us return to the picture of the infant. The days following birth are indeed difficult ones. Even under ideal circumstances, the infant is faced with unavoidable frustrations to which he responds with

intense undifferentiated affects and physical discharges. At first psyche and soma are one. Any psychic trauma has a somatic discharge. Any somatic traumas leave psychic impressions. Disturbances in the infant-mother symbiotic relationship in the first few months lead to anxiety resulting in feeding problems, colic, diarrhea, constipation and what may be the anlage of the psychic components in psychosomatic disorders, such as peptic ulcers, asthma and ulcerative colitis. Increased frustration of essential instinctual needs abnormally increase the amount of anxiety with deleterious physical results. Motherly affection during this period is an essential need, and infants who do not receive it may react with mirasmus and die despite adequate nourishment.

At six months of age the first deciduous teeth erupt. The infant then has his first and most powerful weapon. If he becomes frustrated, he may respond by biting the offending parent. Mother may punish him or speak crossly to him. This feels dangerous. He develops anxiety.

When he starts to crawl and to investigate, he may be hindered by unwelcome restraints. He is forbidden to touch, to sample, to destroy, to soil, to slap, to kick, to scratch, to bite, to spit, to suck, to scream and so on *ad nauseum*. But he learns that if he expresses his mental or physical nausea, Mother withdraws her love. This is dangerous since he is dependent upon Mother for his life. Both birth anxiety and the anxiety of the infant alike claim separation from the mother as their prerequisite. This fear of separation can occur in thousands of minor experiences like the ones given above.

Let us take another common example of an anxiety provoking experience: rivalry. The old problems of Joseph and his brethren, sibling rivalry, frequently disrupt the peace of the home. Also, the child is jealous because his parents love one another and because they love the other children. The child wishes to be the one and only beloved of his mother and father. When the new baby is born, the child often says, "Send him back. We don't want him." Or the child awaits an opportunity to hit the new infant. Or the child may attempt to destroy the sibling by pushing him down the stairs, hanging him on the clothes line, sticking a nipple down his throat, or feeding him poison tablets from the medicine chest. These are but a few examples from real-life experiences.

Jealousies between fathers and sons and mothers and daughters are important producers of much anxiety. This anxiety is an expression of the fear of separation from the parents. What then does the child do with all this anxiety? It is too painful to live with.

The child may transform the anxiety by one of several mechanisms:

1. Perhaps the child avoids the anxiety completely by developing "good boy" character traits. He may become overly kind to the younger sibling whom he hates or overly admiring of the father whose tyranny he cannot stand. He becomes gentle, shows horror of violence and great solicitude for the supposed loved ones. He can't stand the sight of blood, or vomitus or feces. He may become teacher's pet. Under the calm exterior, the anxiety will short circuit elsewhere—migraine, colitis, hypertension, polyuria, diarrhea.

2. Perhaps he does not disguise his reaction to prohibitions completely, but may redirect them from the parents to people of lesser importance or to inanimate objects. He may kick the dog, beat the cat, break his toys or pick a fight with a smaller neighborhood child. He may spit at strangers or throw rocks at passing cars. The relief in family tension is offset by negative attitudes to people outside of the family circle. As he grows he continues to behave in the pattern established when very young. He may continue to be destructive and cruel, to fight, to bully, to lose his temper. He may later express hostility to teachers, employers, wife, husband, child or anyone with whom he feels he can get away with it. Attitudes such as these are not reversible by experience, because they are anachronistic. They are not based on what the teachers, employers, really are like, but are based on the displaced hostility from the authoritarian figures of the nursery years. Such a pattern is responsible for much of the strain, suspiciousness and intolerance in the relationships between individuals and nations. Sissy and bully are common patterns.

3. Perhaps the child eliminates anxiety by projecting unacceptable feelings outward. They cease to be felt as part of the child's inner world and are ascribed to persons or things in the external world. One example was the concern of a mother over her three-year-old who had developed a fear of having a bowel movement because she was terrified that the movements would

bite her. This caused frequent trips to the lavatory with no results. We worked this problem out successfully, because we came to understand that the child was feeling anxious because of hostile feelings to the mother at that time and in an attempt to deny these feelings and avoid further anxiety, projected her desire to bite mother out on to the bowel movement and substituted herself as the object of the biting. Another example is the mother who became upset because her child became terrified of her and claimed that mother was going to hurt her despite vigorous repeated denials by the mother. The mother had previously been the object of much affection from the child. But mother had gone away on a trip. This aroused separation anxiety. The sudden change in the child was an attempt by the child to feel safe by projecting her resulting hostility on to the mother. By putting the mother in the role of aggressor and persecutor, she disguised her desire to hurt mother. These similar ideas and mechanisms are seen in the mentally ill adults. They are seen in paranoid personalities and in paranoid schizophrenics who have delusions of persecution and auditory hallucinations of a persecutory nature.

4. Perhaps the child avoids his anxiety by turning his hostility in against himself. He becomes furious with himself and feels wicked and shameful. The harmful consequences are manifold and are expressed by a heightened inclination to develop organic illness, a tendency toward frequent harmful accidents, and in the mental sphere as manifestations of an overly strict conscience, as in the depressive states.

A man reported a clear-cut example in his own child. Each evening at the dinner table he had brought verbal pressure on her because she was not eating well and finally he had threatened punitive action. The next evening just before dinner time she made what was for her an unusually clumsy movement, fell over the dog and hit her front teeth on a chair. Without crying she arose, sat down at the table and announced that she couldn't eat because she had hurt her teeth. Thus the child avoided anxiety by turning her hostility inward against herself—punishing the teeth with which she was desirous of biting her father and at the same time conquering the situation through self-inflicted injury.

5. Perhaps the child's anxiety doesn't develop,

(Continued on Page 1265)

Psychological Medicine

By John M. Dorsey, M.D.

Detroit, Michigan

Self Consciousness vs. Self Hypnosis

"A dangerous tendency is to such a limitation to a speciality as will lead to withdrawal from the common interests of the profession. A medical specialist should not thereby, in his sentiments and conduct, be any the less a physician; the honor, dignity, and usefulness of the profession, as a whole, should be as sacred in his estimation as if he were not a specialist. If the effect of specialism be otherwise, alas for the medical profession of the future, as regards the respect of others and the self-respect of its members!"

AUSTIN FLINT¹

THE FOLLOWING venture in medical realism is one which I find helpful. At first reading, one or another of its self-observations seems pretty high-up, although none is, or can be, over my head. May it awaken an able mind to the important task of a weightier and more attractive presentation of medical psychology as being the physician's study and practice of medicine in his mind. The more every physician lives himself consciously the more he grows a wide awake view that his whole "world" is all his, his world which he grows within himself as a creation of his own mind. Seeing that every meaning of health and of illness has a psychologic existence, he develops the insight that it is profitable for him to study and practice himself as a psychologist in each activity of medicine.

In his charming witty address "Careers In Medicine," Dr. William Bennett Bean, State University of Iowa, comments sagely upon "the splintered subunits of medicine" now tending to alienate one specialist from another, as well as physician from layman. In his conclusion he says, "If he achieves intellectual honesty, the physician is beholden to no man, no political group, no industrial machine."²

Dr. Austin Smith, Editor, *Journal of the American Medical Association*, counsels the men and women "who cherish the letters 'M.D.'," upon the importance of the "attitude of mind." He asserts

From Wayne State University College of Medicine.

that, "the future can be made secure only when truth, fearlessness, respect, and perseverance dominate the actions" of every physician.³

This particular autobiographical sketch intends as fearlessly as possible to extend my concept of my full wakefulness to mean only waking up to myself, so that I shall see all of my medicare as self-care. Although the "individual variant" has always represented the basic orientation of the doctors of medicine, in the name of Aesculapius, why is it that radical individualism, implicit in the self-evident truths that every patient must restore himself to, and maintain, his health, has not been sufficiently a serious medical position?

The person of hysterical character, who caricatures the self-development of the mature person, depends for his "show" of living upon the illusion that "somebody else" can be conscious for him. Thus his system of psychology depends upon his illusion of being "in the lime light," "up stage," "front and center," and so on, without "stage fright." "Stage fright," or "buck fever," is the product of a self consciousness which is capable of only a restricted range of selfhood. The "hysterical" one has no insight that all of his apparent "between-ness" is really within-ness, or that his apparent use of his language for "communication" is really a soliloquizing. The hysterical character closely precedes the mature character in point of psychogenesis; hence its creator may succeed in taking himself for mature mental development. The mature minded one, however, aware that all consciousness is self-consciousness, that "grand standing" is self-ignorance, readily renounces living "for the gallery" in favor of the full joy of living inherent in his calling his soul his own and seeing his own soul in all of this living.

Any part of my living which I cannot consider my own, and, therefore, which I must live as if foreign to me—all such made unconscious force in my life does not thereby become inactive. Far from that, it functions on as an obstruction to my harmonious existence. For instance, all of my

"not-I" living, which I cannot see as my very own, enforces an obstructive psychology, necessitates great disorder of my human economy, uses up my energy for purposes of maintaining my self deception, and makes me generally live myself as if my individuality is not intact.*

When I am able to use this kind of self-insight I am able to see that my ailing world is in constant and urgent need of medically esteemed and regulated psychological medicine. The opiate of self-unconsciousness develops the most injurious of all addictions. The health indication for my assessing myself as a psychologist presents itself insistently whenever I observe that every phase of my medical work involves nothing but my use of my mind. All of my "doing" is really my minding, or mental doing, which is mostly unrecognized as such. It is my living only which can "make." My life makes what I "do."

As a physician of any division of medicine, my only question about using psychological medicine is whether I shall employ psychotherapy consciously, that is, in a way in which I can voluntarily control its dosage, or unconsciously, that is, in a way in which I leave its dosage largely to my patient's decision, or to my other unconscious forces sometimes conveniently summed up in the word "chance."

The Study and Practice of Medicine in Myself

"The eyes of the dead are closed gently;
We also have to open gently the eyes of the living."
COCTEAU

The psychical work of delicately opening my mind's eye to be able to see that every "fact of my immediate experience" is nothing at all except a sign of my own living, to be able to discern that I show "signs of life" by just such self growths as my sensations and perceptions—this human exertion may well be described as a process of "making my self conscious," so that I can escape fixing my life and self esteem on some lower round of activity. Nowhere can I suffer more from arrest of development than in my self-awareness! Nowhere can I enjoy more the momentum of progress than in extending my conscious self-tolerance.

*Professor Walter H. Seegers, Chairman of Wayne's Department of Physiology and Pharmacology, pays due attention to the physiological expressions of clear and obstructive psychology in the training of his student in integrative physiology.

What else can my external "observation" be other than a creation of my introspection!***

I consider that the culmination of my personal, including professional, development occurred when I grew strength of mind sufficient to diagnose myself as a patient, a psychiatric patient, suffering both from mental weakness and mental illness, and thus became able to devote myself continuously to the strengthening and healing of my mind. Before I was unable to diagnose my way of living myself as being ill, I was unable to consider treating myself well. As Dr. Alfred T. Schofield noted, "Is it not extraordinary what value the public attach to such a trivial matter as 'cure'; and yet how utterly incapable they seem of grasping the importance of 'diagnosis'?" A sage M.D. sees his professional role as a medical psychologist, a psychological physiologist. He observes that the removal of psychology from any medical work leaves nothing, that a body without a mind is dead, that life without mind is life without meaning. He will find himself striving to see to it that every one of his fellow physicians in organized (integrated) medicine is alerted to the comprehensive meaning of psychological medicine.

It is not hard to trace the origin of any physician's uncertainty as to whether or not he is entitled to regard himself as a professional medical psychologist. From his earliest years he may have enjoyed little or no opportunity for disciplining himself to look to his mind as the source of his vitality, or even to observe the living of his own creaturehood in the workings of his mind. His early schooling may not have served as a means for his observing his education, or learning, to be nothing but an expression of his self-growth, nothing but his very own mental development. Even in his medical school living he may not have trained his mind to observe the various data of his several medical disciplines as being nothing but psychological data, entirely self-discoveries constituting the building of his very own medical character. Chances are he may have kept himself so busy "learning the facts" about what he called

***The Gregor Center is a small thirty-three bed general hospital used by my department faculty as a training center where my medical student may observe in practice the therapeutic force of medical concentration upon self-reliance, self-heal, self recovery, and self esteem which includes feeling grateful to one's self for the self power enabling all such self control over one's health interests.

"anatomy," "physiology," "chemistry," "psychiatry," and so on, that he forgot the only truth of the matter, namely, the one fact of his own development as a medical student. If in one or another part of his curriculum, he did have the opportunity to study his school work as being entirely his own self-growth, the rest of his medical school living may have favored his mental dissociation to an extent calling for, but not receiving, his giving himself the one psychiatric treatment efficacious under the circumstances, namely, restorative self-consciousness. Every medical student's life creates and controls all that he lives. His medical school lives in him, not he in his medical school. His life contributes all of the possible meaning his professor or his textbook can have. His life-force is all that can possibly have any basic meaning to him, or create any auxiliary meanings for him. His vitality is his *vis medicatrix naturae*. His four years of living his medical school are best devoted to his finding out in a self-reliant way the true wonderfulness of himself as a human being, his marvelous powers as an individual, his unique vital force as a person. Can it be that his present opportunity to discover his potential strength by training his mind in the way of medical living can be improved. As William James observed, for an empiricist every difference must make a difference.

Happily any kind of unconscious medical school living, requiring the medical student to work his head "off" instead of on, "the morbid pursuit of health," has been yielding place to the living of safe and sane medical education recognizable as self-activity. The picture is a cheerful one. The veteran practitioner has grown the insight that he is a medical psychologist, in the unfailing school of personal experience; the recent graduate has methodically trained himself as being a medical psychologist. It is only the remaining practitioner who discovers to his surprise that his patient's mind is crying for a relief from a specific kind of disregard clearly definable as self-hypnosis. Nevertheless, this brother physician may sense his own unpreparedness to tend, to care for, himself as a medical psychologist. He cannot recognize that self-consciousness is truly the healthy enlivening, yet tranquilizing force which it is, particularly if he has had the specific habit of mind which associates the use of self-consciousness only with the production of pain and of self-

unconsciousness only with the alleviation of pain. He can help himself tremendously with the discovery that self-consciousness is such a life necessity that if a child cannot live it self-reliantly he must have his "somebody else" live it for him (by "attention seeking"), and that his patient, overwhelmed by stress of suffering, invariably regresses to this "childish" way of expressing his need to live more of himself as worthy of consciousness than just his complaints.

It is this latter physician particularly who may appreciate finding in his own medical journal recurring considerations on psychological medicine. He is an earnest sincere practitioner who, recognizing (1) the extremity of his patient's need for mental support, and (2) the dearth of specialist psychiatric helpfulness in his community, may turn to some professional man, not a physician, as possibly able to supply psychological medicine. Although I feel certain that no one who is not a physician, and who knows what he is doing, would find it possible to assume, or usurp, this life-and-death kind of responsibility, or would consider medical work for which he is untrained to be a welcome opportunity for him, nevertheless it is readily conceivable that many a well-intentioned nonmedical man may get himself into this kind of serious trouble without realizing its full extent.

Any and all prevailing illusional views of what constitutes, or shall constitute, the legal practice of medicine, may be seen as of health account, in calling attention to the clear picture of the necessity for the study, as well as the practice, of medicine in one's physician. I may be intolerant of my brother physician's disregard for his force of mind as a tremendous medical force, but I will not expect my brother layman to assume that professional prerogative. Likewise, my brother physician will not expect his brother layman to practice psychological medicine in himself before studying it. That is, he will not expect such an accomplishment once he recognizes its full implications. The very idea of a layman undertaking "wild" medical work must be one for every physician to renounce kindly and firmly, realizing as he does the innumerable and inevitable life risks involved in his own medical living. Is it not likely, however, that neglect of the conscious use of the mental force by the doctor of medicine necessarily encourages its conscious use with medical intention by others?

The Legal Practice of Medicine

Nearly half a millennium B.C., Socrates came back from army service to report to his Greek countrymen that in one respect the barbarian Thracians were in advance of Greek civilization: They knew that the body could not be cured without the mind. "This," he continued, "is the reason why the cure of many diseases is unknown to the physicians of Hellas, because they are ignorant of the whole." It was Hippocrates, the Father of Medicine, who said: "In order to cure the human body it is necessary to have a knowledge of the whole of things." And Paracelsus wrote: "True medicine only arises from the creative knowledge of the last and deepest powers of the whole universe; only he who grasps the innermost nature of man, can cure him in earnest." To us today this seems rather an impossible demand.

FLANDERS DUNBAR

Who should practice psychotherapy? How should undergraduate medical training represent psychiatry? Should this training even consider psychiatric education as a separate discipline apart from every other kind of medical training? May not such a first view of psychiatry, as being isolable from other medical interests, be an unrecognized basis for a physician's later dissociation of psychotherapy from "other" medical and surgical diagnosis and treatment? Ought not undergraduate medical training be aimed at the development of every physician as a psychotherapist, not at interesting a few students in "going into psychiatry as a specialty?" May not this recognition of the mind as living itself in bodily ways, as giving the only meaning to "body" that body can have, provide a greatly needed insight for the health education (preventive medicine) program? May not the servant of the poor in health, the attending physician, attain his full therapeutic power in discovering that healthy self-esteem is the product of extending self-consciousness, quite as unhealthy self-disesteem is the product of ignoring the greatness of one's own being?

As a student of psychological medicine for some thirty-two years, I see clearly its present development, hence future achievement, to be centered in the mind of every physician. *May responsibility for being a medical psychologist, a student and practitioner of psychological medicine, be either in the consciousness or on the conscience of each and every medical practitioner.*

The interest of every one of us is now properly excited by a question frequently raised: What shall constitute the legal practice of medicine? Surely this is a question to which every medical educator, each qualified doctor of the profession

of medicine, wishes and intends to see the clear answer. It is also understandable that he view this question as one which cannot be answered without the voice of the physician himself. As physician he respects the law of his land as authoritative in deciding what shall constitute the legal practice of medicine. He knows from his own personal experience what it means to grow himself as a physician, licensed to practice his profession. He has discovered many of the innumerable personal risks involved in his pursuing his medical way of life. He has grown a healthy respect for such medical meanings as "symptom," "complaint," "protest," "suffering," "early signs of serious disorder," "growing pains." His helpful sincere helpfulness and watchfulness are lived in terms of potential awareness of serious trouble, of grievous health risk, of unhappiest living.

Every physician's view as to what constitutes the legal practice of medicine contains the keenest appreciation of the nature of the privileges and responsibilities inherent in his professional world. He regards his medical living not only as a source of his livelihood but also as the source of his life itself, as devoted to cherishing and furthering the liberty and happiness inherent in healthy human development. He cannot abdicate his physicianship to anyone of his fellowmen who is not a physician, on account of the simple fact that he has personally grown his own insight as to what constitutes the privilege and responsibility spelled out in the words "The Legal Practice Of Medicine." He sees that violation of "medical practice" might be attempted but cannot be perpetrated any more than the passing of counterfeit money can succeed in making it legal tender. The unique specificity implicit in the study and practice of myself in medicine is factual and inviolable insofar as my qualifications meet all of the professional requirements including legal, requirements involved. I can conceive of no worse predicament for anyone than that of taking upon himself the responsibility for being a physician without having the proper medical and legal qualifications for it.

It is to the credit of every American that every citizen's demand for proper health care has been steadily on the increase. As respect for the dignity of individuality grows in every citizen, certain of his rightful needs are bound to be sensed by him as properly insistent upon attention. One of these is his right to educate himself, another is his right to secure his health, prevent illness and accident.

and recover himself from any kind of disorder. The American physician gladly sees his fellowman exercise this right, recognizing it as basic for his pursuit of life, liberty and happiness. This same physician recognizes the need for many more trained medical personnel, just as he is painfully aware of the critical risks involved in the licensing of inadequately trained medical workers, not to mention the actual harm involved if a nonmedically trained one independently assumes medical responsibilities.

Health benefit, the opportunity for wholesome self-help, being the first concern in the mind of every American citizen, it is only prudent for him to safeguard by law what shall constitute the practice of medicine. Every physician recognizes that his fellow citizen is entirely free to help himself in every matter pertaining to his health. How he shall help himself is also a matter of his free choice. Every physician realizes that it is up to every citizen to treat himself well, in a way which will not interfere with his fellow citizen's treating himself well. Every doctor of medicine, in studying and practicing himself in his own chosen profession, cherishes his fellow citizen's right to take care of himself as best he can. *Caveat emptor* may appear to be a weak warning call which seems to abandon the buyer in an open market, but that is only a seeming. It is in truth a proper watchcry of the deeply concerned medical educator. Conscious freedom of individuality, including his health interests, is an indispensable basis for every one's progress in health and strength.

In a comprehensive sense, a person treats himself in numerous ways which he considers being good for his health." For instance, all of his normal education may be conceived as education to health, and all of his religious living may be similarly considered. His "job" may be seen as occupational therapy. Even his climate has this health value for him, and so on. In appreciating all of the various ways in which his fellow man can help himself to strength and health, the physician has never in any way attempted to monopolize health helpfulness. His medical profession has succeeded on account of the fact that full respect for the total human individual is the basis for all of its work. However, as a layman, and as a physician, it is his civic duty to uphold what he regards as opening, and renounce what he regards as impeding, the way of health.

All of Medicine is Psychological Medicine

"What unsatisfactory cases these are! This clever charming, and widely known lady will some day disgrace us all by being juggled out of her maladies by some bold quack who by mere force of assertion will give her the will to bear, or forget, or suppress all the turbulences of her nervous system."

SIR JAMES PAGET, 1866

In this brief article it is possible to report the basic meaning of psychological medicine. In the first place this kind of self-discipline involves the physician's systematically aiming at viewing his patient as a part of his own living. In order to treat my patient as myself I have to be able to be conscious of a sense of my identity, a sense of living myself, in all that would be traditionally known as "the patient's living." For me, observing my patient is a matter of growing my perceptions and my sensations which I personify as my patient, a matter of regarding a series of perceptions and sensations of mine as "my patient." I do not, as the saying goes, "put myself in my patient's shoes," or have my patient "put himself in my shoes." Quite the contrary my patient is to be cherished in terms of all of his (my "his") individuality. For instance, just as I see my patient as a living part of myself which I call my patient, similarly I see my patient as living a part of himself which he calls his own physician.

In my study and practice of psychiatry in myself I renounce the pleasing view that I can help my patient, but I claim the more gratifying view that my patient is able to help himself. Thereby, I observe in action the vitalities of all healing, or virtue, in the simple heart of selfhood. My patient's realization of his ability to help himself is an invigorating one, contributing to his proper sense of self-esteem. By treating my patient as a part of myself I insure humaneness, kindness, in my every medical procedure. Psychological medicine is a modification of the Golden Rule. I do unto myself as I would have my patient do unto his self. I remain aware that I am self-contained in my living of my patient, renouncing every temptation to live myself as if I could be "out of my mind" and getting at a life other than my own.

Any and every way in which I live myself is a development of my individuality, a growing of my personality, which has any and every meaning for me only in so far as that meaning exists in my mind. What does my nourishment, or my medication, or my operation, or my patient mean?

is the same as asking, how am I living each of those meanings? Awareness, or lack of awareness, changes the meaning itself no more than does my liking or disliking it. However, awareness does reveal each meaning as my own to care for. "I hate to admit it but it's true," is a viewpoint associated with all psychological "growing pains."

All Data Are Self Data

It has been asserted, by one who was laboring under mental derangement, that the only difference between the sane and the insane, is, that the former conceal their thoughts, while the latter give them utterance. This distinction is far less erroneous than might generally be supposed, and is not destitute of analogy to the remark of Talleyrand, that "language was invented for the purpose of concealing thought."

PLINY EARLE*

Depending entirely as it does upon my human system for all of its meaning, my system of pedagogy may best be described as psychagogy, as made up entirely of selfness. The term psychic, or mental, is not a term parallel to "physics," or "material," but rather is a meaning which subsumes all meaning.

It is well to observe that the statement, "I am my only reality," is not simply a restatement of a dogma of philosophy known as "psychic monism." My consciousness of my oneness, individuality, is not a product of theorizing, hypothesizing, philosophizing, but of psychologizing, of using self-observation. My appreciation of myself as an individual is not based upon judgment or reasoning in any respect whatsoever. "I see," "I sense," "I perceive," "I feel," "I observe,"—each of these expressions does describe a basis for my appreciation, or measurement, of myself as an indivisible whole person originating all of my human being.

As an individual I search myself. What does my human being consist of? The next view I see is a clarifying one. An individual can consist only of individuality. A self can consist only of selfness, quite as a tree can consist only of tree-ness. Everywhere I view myself, I find my property of individuality. As I grow my perception of my fellowman, my fellowman is seen as an individual, absolutely autonomous, radically unique. Thus, everywhere I turn I can find only particular selfness, such selfness characterized by the property of oneness. Seeing myself clearly as an individual

necessitates my seeing every individuation of myself as living this property of wholeness which is true of my complete individuality.

Again, it is helpful to realize that all apparent "between-ness" can only really be "within-ness." Loving my everyone and my everything is only living to the full, my natural self-love. My living can be health education to the extent that I am capable of observing it as my own, hence expressing my spirited, soulful, humane meaning. I cannot remind myself too often of my selfish interest in every "view of life," for it is my living. Being extreme in this direction leads only to being extremely sane. Sensing intensely the absolute uniqueness of my unity or selfhood provides me with true appreciation of every element of my world which lives within me.

Sometimes one finds expressed the idea, "Medicine has two categories of health activity, (1) purely psychological, having to do with theory, and (2) purely 'physical' (nonpsychological), having to do with practice." The former medical living is then implied to contain all of the humanics, the latter all of the mechanics, of medical living. It is well to see any such illusion as this for what it is, namely an illusion, so that it can be dispelled, renounced as a dim view which does not recognize every aspect of the so-called "mechanics" of medicine for its true psychological significance. For instance, as a surgeon performing an operation, I am only applying my psychological insights in the form of skilled techniques.⁴

All of my human experience may be accurately defined as psychological only, insofar as it has any meaning for me at all. "Meaning" is always a mental element, a psychological entity. For instance the meaning of any word I use points to a living existent of my mind. As Bentham noted, "Lamentable have been the confusion and darkness produced by taking the names of fictitious for the names of real entities." The history of my language reveals my mental development. What has no meaning for me is incomprehensible to me. My life produces all that I make conscious, my consciousness does not produce my life.

The one kind of training or discipline possible is self-development. The best and most searching self-activity is called "learning." It is associated with the insight that meaning of any kind can be nothing but each one's self-felt experience. It is possible for me to live most of my life in the shallows of illusional "not-self,"

*Physician to the Bloomingdale Asylum for the Insane, New York City. *American Journal of Insanity*, January, 1845, Article I. The Poetry of Insanity.

without making the all important philological discovery that every word of every language of any meaning to me is a word which spells out something about me. I have no civilization or education whatsoever except that which is constituted of my own life. And my concentration upon this point of view, that my whole world is nothing but my personal being, is indispensable for my maintaining my sanity.

What is "on my mind" is a part of my mind, and cannot exist for me apart from my mind. My truth is found in my life process, there being nowhere else for me. In this same sense, all of my medicine must be observable as psychological medicine. This realistic view of objective truth (of seeing my identity in all of my living) spares me such a sorry scene as, "The psychiatrist is off his medical base, and every other doctor of medicine is off his psychological base." In 1905, Freud described psychotherapy as the treatment of every kind of health disorder with psychological means.⁵ He described how the perceptual thinking of the scientifically schooled physician of his day specifically trained him in the use of sensations and perceptions, trained him as a means not as an end. This training, however, did not include the development of the medical student's appreciation of his sensations and perceptions as being creations of his own mind, as being his own psychological (self) data. To a varying extent the same kind of "impersonal" medical training exists to this day. However, modern medicine is already on the road to the discipline of self study with self-insight. The one mental identity underlying all body, and all other "external world," meanings, is becoming more and more the focus of attention of the student who is increasing his appreciation of his body as a mental instrument, and his "external world" as an internal existence of his own. As my Osler's beloved Ralph Waldo Emerson observed, the world is nothing, the man's world is all! Ricardo noted somewhat the same view, "The pursuit of individual advantage is admirably connected with the universal good of the whole."

For me to recognize every statement on psychological medicine as a clearly evident self-observation, it is essential that such deep medical insight be readily developed by me. Quite as the religious educator has discovered that everyone must save his own soul, as a physician, I may discover that

everyone is entirely responsible for the preservation of his own health. The individual seeking religious or medical helpfulness finds it in the purest form in his religious or medical counselor who upholds this supreme degree of reverence for his own individuality. It is as though the radical religious, or medical, individualist is endowed with charismatic virtue.

The Comprehensive Medical View of Human Individuality

"We must all be born again atom by atom from hour to hour, or perish all at once beyond repair."

CHIEF JUSTICE HOLMES

In everything having to do with health it is essential that the over-all significance of self-esteem be thoroughly appreciated. The full realization of the health significance of self-esteem makes understandable the need for the most radical respect for the dignity of the individual, and accounts for the healing force concentrated in the physician's keen awareness of the inviolability of his own, hence his patient's, individuality. This extreme degree of self-consciousness, extreme sanity, is of greatest medical significance. It is implicit in every physician's most complete satisfaction in having his patient consciously help himself, admittedly cure himself. Only the human individual can strengthen or heal himself. Every kind of illness or accident threatens his proper wholesome feeling of self-esteem. His ability to restore himself is a power which he needs to see as his own in order that his full sense of self-esteem, healthy-mindedness, may be retained.

Being a medical educator, in my profession I require a psychology which will work peacefully for me, as I "see to it" that each one of my medical students reveres the dignity of his own developing medical character. I have attempted to record the psychological foundation of my pedagogical system as being nothing but the living of myself, and thereby growing my medical student instructor and curricular data, consciously as self-experiences of my very own. All of this, my medical Video, I write as an authority, but only with regard to my own genesis as a physician. Soren Kierkegaard, a self-conscious existent of one hundred years ago, recorded that his own individuality "by relating itself to its own self and by willing to be itself is grounded transparently in the Power which constituted it," adding "this is the definition of faith."

Any current doctrines of "medical education" which try to personify abstraction apparently by distraction from person, or make way for the studies by obliterating the student, are necessarily negative to the requirements and rights of human individuality. I am entirely a self, not an aggregate of self and not-self! Little wonder that the natural feeling of certainty has to be "scientifically" validated only by multiple verifications. Every aggregate is an individual one, but has individuality, or self identity, in no other sense than as an aggregate! Physiology not studied as psychological physiology must be studied as an aggregate of life processes. Instead of being viewed as naturally due to one organic wholeness, any fitness of its parts must be appraised as pure coincidence. The ontology of an aggregate is a matter of peripheral collection of each of its separate parts, not a growth of one being from within out. Every "part" of a human being has its entire life and selfish meaning by virtue of its being a part of a whole human being, and not an independent isolable unit of an aggregate. Each man speaks selfishly for all of himself, even though he must show the extent of his self-unconsciousness in the act. Every organ of his body utters the degree of self-consciousness with which he lives himself (*Organsprache*). Continuing research in psychological physiology, human physiology, made possible by insights derivable from self-consciousness, may confidently be expected to discover the truths of human physiology and of the proper care of the independent self-acting human individual.*

How I have grown higher and higher stages of mind and yet cherished for its indispensability to my healthy living each preceding deeper mental stage, needs no further elucidation than that I helped all of myself in that way. I continue my aim to live myself consciously for I find it too unhealthy to be continually aiming at self-ignorance. When I overwhelm myself with the importance of this or that, I can restore my homeostasis (mental equilibrium) by realizing that all of the importance of my "this" or "that" is only

my own importance which is showing. How right the view, "I'm alive and that's what counts!"

The substantiality of my appreciating myself as a self-conscious one increases every time I live (create) the view of being my own "this" or "that" or "everything." The force of mind made up of my apperceptions pertaining to my consciousness of the allness of my individuality is most life-affirming. Realizing that I must grow myself in the direction of my devotion, I am devoting as much of my living as possible towards the creation of the self-conscious habit of mind, by repeated acts of seeing and owning my own soul in my swiftly growing sensations and perceptions.

My "old" psychology consisted of my traditional view of being an all-important mite in a mighty universe. I felt important even with that discouraging self estimate, but I did have no end of trouble "justifying" the sense of importance I had. With the extension of my consciousness to include more of my individuality, the very "external world" views with which I formerly had to dwarf my "self-realization" served to reveal my true self size. At last, the high sounding magnanimities of the consciously great ones began to make sense. Where else could the kingdom of God be but within me? How truly could I be true to "anyone else" except by being true to myself? How else can I love my neighbor except as myself? Why not love my enemies, my very own creations?—and so on. Gradually, I began to see clearly that formerly I used my imagination wildly to deceive myself that my external world was not mine at all, not my self-contained internality at all. As I revised my self-estimate to correspond with my growth of insight, of self-consciousness, I was appalled with the degree my verbalization of myself alone appeared to stand for a disease of language, a delirium of being able to live "out of my mind," "beside myself," "off my base" of selfhood, and the like. The significance of naming his things and his others for the little child, suddenly clarified itself as being of greatest significance for his sanity. How essential that every name be a synonym for his own name, and be appreciated as such!

As I calmed down, I realized that I had to go "through the mill" in order to get through it, and that everyone of my fellow creatures similarly must help, and is helping, himself, all that he can, to progress. "Meddling" grew to be a term of

*Dr. Thomas J. Heldt, for decades as the able director of the division of neuropsychiatry of The Henry Ford Hospital, created a splendid record of unifying psychiatric with general hospital living. Every general hospital has a wonderful development as it adds a psychiatric service. All honor to Dr. Heldt! Dr. Albert M. Barrett was the first in the United States to have a psychiatric service in association with a University hospital.

great meaning for me, designating my getting in my own way, defeating my purpose with good intentions unsupported by good insight. A particularly apt story, narrated by my Moncure D. Conway, helped me to stay out of trouble.

An American missionary on a savage island made one convert but refused to baptize him, for he had four wives. But one day the convert came and said he had but one wife. "What has become of the others?" asked the missionary. "I ate them," said the convert.

In his spirited challenging book, "The Force of Mind," published by Funk and Wagnalls Company, 1902, Alfred T. Schofield, M.D., M.R.C.S., drew a curious analogy upon the prevailing neglect of psychotherapy in the treatment of the mind and the rigid British military tactician's refusal to adapt his warfare to the methods and terrain of his Boer enemy, counselling that the unsuccessful physician study the methods of the successful "quack." Perhaps the analogy is not curious, after all, if one considers the degree to which fitness of health has carried the significance of fitness for warfare. Today's physician is too often pictured as a man of war fighting disease, rather than as a man of peace kindly studying his human nature in order to become able to enjoy to the full his harmonious existence. Neither peace, nor war, nor anything else, can exist in "between-ness," for instance, between one man and another. Peace, or war, is to be found only within each human being. Between-ness is no man's land; within-ness is the nature of all that exists. In growing out of his quackery, did my historic physician try to throw the baby, "Imagination," out with the bathwater of "exact perceptions"? Does it not seem sometimes as if reference to "psychic" is not considered to be sufficiently "physic" even though it is the psychic alone which obtains? When I say "practical" I often mean "easy." In reading a text book of medicine today, I am profoundly moved by its impersonal tone, by having to read humaneness into it. That which is overlooked in study is apt to be ignored in practice, and so it is too often, is it not? Is it not easy to attend raptly even to his medical history and be inattentive to my fellow man? Can human being ever be taken for granted in careful medical work?*

The only force which can vitalize the "scientific data of medicine" is one which vivifies what meaning each of these facts may thus have. "Mean-

ing" is entirely and clearly a mental force. If one can imagine even dead impersonal data as being vital with meaning, how much more quick with meaning may live personal data be imagined to be. Scientific flashes of imagination are, in every instance, deeply personal experiences having to do with consciously unifying meaning which was not consciously unified before. The human being is not a chaos of aggregated facts; gradually waking up to that fact has been a process of training myself as a medical psychologist. Everyone of my organs derives any and all of its meaning, its vitality, from one source only, from the truth that it is a part of the whole of my living self. To make something out of it otherwise is impossible. It reveals the meaning of me only in the sense that it is a part of me, and in no other way. This fact is useful in helping me to renounce the mad search for research upon my mind through the study of "something other than my mind."

Psychiatric undergraduate training for my Wayne medical student is presented as a means for his disciplining himself in the medical way of life, as a vital experience rather than as an intellectual lesson to be memorized. This training aims at every student's preparing himself to see that he necessarily applies psychological medicine in his medical practice of every kind.

The pressure and the rapidity with which each student must develop his medical character is analogous to the requirements of the force and accelerated mental growth which everyone undergoes during adolescent years. Thus, the four years of his undergraduate medical school living may be seen helpfully as his enforcing within himself a professional adolescence. The student builds the foundation of his medical character within this specified period of time, and needs the kindest care of himself during this formative period.

*Training myself in exact observation is a total impossibility except insofar as I am able to be aware that all of my observation is self-observation, quite as all of my consciousness is self-consciousness. I cannot keep my mind out of its own activity. And as far as interpreting my mind by "non-mental" means is concerned, the statement of my Herbert Spencer about that is well worded, "There is not the remotest possibility of so interpreting it." Anything which I construct with the use of my hands can hardly suffice to account for the existence of my hands. A body without a mind obviously cannot account for mind; a mental body accounting for mind is nothing but mind accounting itself.

Extended and enlightened self-care cultivates best American citizenship. It holds the greatest diagnostic and therapeutic promise for the undergraduate medic, and it is most essential that this promise be brought to performance. It is vain for any student to usurp the name "physician" without devotion to his own health. By increasing his own power only can the student increase his ability to live his patient well. Conversely, anyone, even a physician, who is careless of his own health cannot be convincing as a source of health concern for his patient. This empowering kind of self-sight is a personal health requirement for the hard-working physician who may be killing himself by trying to cure "somebody else."

Deliberately and systematically striving for progress in the development of his own personal strength and health during his own preparation of himself to become a physician provides every undergraduate with the possibility of identifying himself as having a developing mind, as being and having a human life, which needs kind care. During his medical school years every student, the creator and creature of his own power, can benefit himself most from providing himself with the most considerate attention to his own nature and needs. His arousing himself from any lethargy into which he has fallen due to the mental habit of self-ignorance, his seeing what goes into the "making of the doctor," will enable him to discover what must go into the "making of the well man."

Hardness of medical character is possible only where there is repudiation of the truth that one's "otherness" living is one's very own. Such hardness does not proceed from carelessness of inflicting pain but from a want of self-consciousness, by means of which awareness of pain is conferred. It is a great awakening for the medical student when he suddenly sees the innumerable ways in which he can hurt himself without being aware of it; and the innumerable ways in which his organism betrays these self-hurts in organ breakdowns, visceral failures (skin trouble, kidney trouble, heart failure, and other disorders).

The contribution which medical psychology can make toward the more adequate understanding of health, its preservation, and the means of preventing its arrest, reflects the development of human insight, of human self-consciousness, within the past sixty years. Thus I see and report the sanity-

preserving role of self-consciousness in all self-care and self-development. The integration of the principle of inviolable integrity of every human being and the matrix of the medical curriculum, seems to me to provide excellent opportunity for the growth of "comprehensive medicine." This health-producing integration involves the utilization of what properly revered human individuality has discovered about the emotional, and innumerable repressed, aspects of human complaints. The desirable goal of furthering the physician's comprehensive self-sight can be attained as it achieves more extensive living by every member of the medical discipline. The progress of this kind of development will depend largely upon the readiness of each member of my psychiatric faculty to live what he sincerely claims to be most life affirmingly.

Discoveries highlighting the healing force derived from appreciating the dignity of the whole individual man make it possible to offer scientific principles, as a helpful continuation of intuition, in heeding the health requirement of full-measured evaluation of the meaning of entire individual human being. Every bit of this advancement is in the direction of the goal of "comprehensive medicine."*

Mental Health and Conscious Self Government

"In order that man may be persuaded to put forth the intense effort required to change chaos into order, he *must* feel that he has the necessary stature for the assignment, at least the potentialities. . . . It may appear absurd to philosophers, but in our age of specialization it is not only man's concept of matter which must come from science, but also man's concept of himself. . . . At the stage of specialization of our knowledge, to determine what is specifically human in man requires a veritable cracking of the concept of man. This cracking, in its turn, requires a concentrated effort of specialists; as much as was required for the atomic bomb. . . . If the concept is cracked, the release of spiritual energy will be voluminous enough to make physical nuclear energy behave. It might be powerful enough to light the lamps of peace and keep them burning."

ANA MARIA O'NEILL

The method of enlightened medical progress, as does that of true democratic progress, lies I submit, in each citizen's conscious development of his wonderful ability to see his world as his own, and care for his world as himself. To the extent

*Dr. Raymond W. Waggoner, professor and chairman of the department of psychiatry at the University of Michigan, is outstanding for the excellent way in which he identifies psychiatry with medicine.

at a citizen neglects his world, he neglects his health. Self-government, conscious self-culture, is the mind healing and strengthening way of life. As Jefferson noted, "The laws and institutions must go hand in hand with the progress of the human mind." The Declaration of Independence itself is a sublime expression of healthy psychology, a treatise upon the nature and needs of the human mind. Wherever the dignity of individual man is consciously lived, liberty, equality, health, and morality find expression as the joy of being human. The Wayne medical student grows this kind of insight as an integral part of his study of psychological medicine. He discovers for himself the connection between his health potentiality and his wonderful government, the harmony of conscious self-care (self-government) and the physiological requirements of human life. As a precious by-product he sees for himself the health-defeating implications in "state" medicine, quite as he has always been able to see the analogous kind of contradiction implicit in "state" religion.

Conscious self-government has already been introduced into mental hospital living as a successful means of instituting therapeutic, instead of just custodial, patient care.⁶ A conscious effort is sustained by each member of the department of

psychiatry to uphold this health significance of "conscious self-government. Dr. Elmer Hess, immediate past president of the American Medical Association, and honored as "the medical world's mouthpiece," made a discovery early in his practice: "The essence of self-interest is to behave in an unselfish manner." The wholesomely self-conscious physician does not practice his license without his self, any more than he practices his medicine without his license.

A precious wonder of my wonderful existence is the truly heroic life of every doctor of medicine, leading the hazardous career of a servant of the poor in health, a courageous explorer of the actual life of meaning, and an indefatigable researcher upon the most essential meaning of life, Health.

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CLINICAL MANIFESTATIONS OF ANXIETY

(Continued from Page 1254)

is completely denied. Acting out of envy or jealousy, intolerance or suspiciousness may be seen. Or he may outgrow such manifestations and simply be the most disagreeable person in the room. Or, as with Joseph and his brethren, attempt to commit murder.

The various mechanisms which I have touched on: reaction formation, displacement, denial, projection, repression, conversion, are the most important ones involved in the psychic development. They can be found in the normal, the neurotic, the psychotic. They are reactions to anxiety. Through this, I have attempted to show the psychologic theory of mental health and mental illness which conceives of these entities as being the outcome of anxiety-motivated reactions to psychologic threats presented by the person's own impulses, which his early experience led him to treat as dangers.

Pure anxiety, mild or great, normal or pathologic, remains a frequent occurrence throughout life. Until it gives way to the more expanded emotions or until the stimulus for it is removed, it is one of the most painful and intolerable forms of displeasure. Most anxiety reactions are normal everyday occurrences and are relieved spontaneously and individually; a smaller number call for assistance by friends, physicians, clergy, or others who help people in such situations.

Anxiety is the most frequent single symptom in all medicine. The anxiety signal becomes the most powerful motivation force in human life, the power which organizes the character, the defenses, the neuroses. It behooves physicians to be alert to the presence of this symptom and to become familiar with methods not only of alleviating the symptom but also of understanding and removing the causes of the symptom.

A New Approach to the Clinical Management and Treatment of Behavior Problems

Progress Report

By John T. Ferguson, M.D.
Traverse City, Michigan

FOUR YEARS ago, fifty-seven patients from the women's halls and cottages left our hospital. Last year the number was 199. The facts behind these figures—the facts behind this 350 per cent improvement in chronic patient release is the story of progress in the management and treatment of abnormal behavior.

I want to tell that story. I want to tell where we stand in the fight to eradicate mental illness—of the progress being made in treatment of abnormal behavior—and the part you can play in this effort.

In research every phase of behavior is being studied—every phase from the behavior of a single cell to the behavior of whole communities. Every facet of psychopharmacology and physiology is being studied and re-evaluated. The search for new enzyme systems, new toxins and new chemicals within the body has increased. Today research is an all-out effort, and from all of this work something of value will undoubtedly appear. However, to date, the most useful and the most practical information has come from the clinical observations by private practitioners and state hospital clinicians—from men interested in their patients as people.

In most cases this honest, straight-forward type of clinical research has met with much opposition from the pure scientists and those individuals that believe you can measure and weigh a man's soul as you would a chemical. It has met this opposition and it will defeat it. This is true because in most cases we know neither the process by which these new drugs exert their peculiar effect upon human behavior nor the biochemical abnormalities associated with the behaviors we are treating. Consequently, this makes the purely scientific evaluation of these new drugs, on a strict comparison of percentages of diagnoses

helped, almost analogous to what might have happened had the antibiotics been evaluated similarly in a group of febrile diseases many years before the development of the science of bacteriology.

Two months ago in Washington I participated in a government-sponsored "Working Conference on the Status and Improvement of Clinical Drug Evaluation Reports." It was not a publicized meeting, but a small conference of thirty-five Canadian and American doctors actively engaged in clinical research with the new drugs. At that meeting the committee members agreed that the new neuropharmacologic drugs are not specific for any particular type of mental illness, but are primarily for the management of abnormal behavior. This group also agreed that the dose should be tailored to the patient and that the best results were obtained when the patient was given rehabilitative help. In short, for the first time, this group agreed that the Art of Medicine was not lost—but was a vital part of a successful therapeutic program.

Consequently, I'm glad I participated in that meeting because it reaffirmed within me my belief that the answer to mental illness lies with the doctors in the front line. Doctors just like you and me—doctors that see their patients as sick humans, and not diseases.

I believe this because the fate of the mental patient is usually in the hands of the first physician who sees the patient. The ability of this doctor to control or ameliorate the abnormal behavior that brings the patient to his attention is often the difference between the patient's ability to remain at home and the need for commitment.

A few months ago I received a letter from a doctor in Charlevoix, in which he described a confused and disoriented eighty-two-year-old woman who was nude, incontinent and a terrific management problem for her relatives. He sent the letter because neither he nor the relatives wanted

Presented at the Michigan Clinical Institute, Detroit, Michigan, March, 1957.
From Traverse City State Hospital.

commit her if it could be prevented, and he wondered if we could help. I sent him a supply of drugs and a copy of our paper that appeared in the September, 1956, *JOURNAL OF THE MICHIGAN STATE MEDICAL SOCIETY*. Three weeks later I received another letter from him thanking me for my help and describing the improvement the woman had made—above all, she did not need to be committed.

This story is but one of several that we have on file—and I take my hat off to all of these pioneering doctors, because they indicate that you—the doctors in the front line—hold the keys that will unlock the mysteries surrounding mental illness. You hold the answers for decreasing our state hospital population and the sociomedical problems associated with hospitalization. It is my belief that by the early detection and treatment of the abnormal behavior that first brings the patient to our attention, you can prevent many possible commitments from materializing.

This may seem like a tremendous challenge, but it isn't, because the management of a diabetic patient or a cardiac patient requires much more time and effort than does the management of a case of abnormal behavior. However, in each case the principle is the same, because with all three you are seeking to establish a balance compatible with the individual and his environment.

The better understanding of this balance technique in treating abnormal behavior is a good example of progress through failure, because this new approach was formulated as the result of adverse findings with many of the new drugs. Many of us lost sight of the basic balances of the body and treated only one component of behavior. With the tranquilizers we saw depression when we removed overactivity—with the analeptics we saw overactivity when we removed the depression. However, we also observed that in most patients, regardless of the outward behavior manifestation, there was an element of the opposite behavior present and that the proper combination of a drug for overactivity and a drug for underactivity would produce better results than either drug when used separately. I cannot give you the number of different combinations we have tried in our research, but I can tell you from this work that all types of abnormal behavior can be changed or controlled.

I have refrained from saying that the new drugs

cure abnormal behavior because they don't cure—they merely make the patient more accessible for other therapeutic measures that, previous to administration of the new drugs, would have been useless. That is one point that is not fully understood. The drugs open the treatment door for the patient—how far he comes back into the world of reality depends upon how much help and encouragement he can be given.

Another point that is not fully understood is the need for individualization of dosage. This is true whether you are using small doses or large—and unless it is done you will run into side reactions and difficulty. To continue unaltered the same dose of a tranquilizer or an analeptic that produces clinical change in a patient's behavior will only lead to trouble.

In this respect, there is a marked similarity between the management of diabetes and the management of abnormal behavior. Were you to continue without change the original dose of insulin needed to reduce a diabetic patient's blood sugar, you would encounter difficulties. Consequently, you watch the blood sugar level, and, as it changes, you prescribe that amount of insulin needed to produce the blood sugar level and clinical picture that is optimal for each patient. The same is true in treating abnormal behavior, although no special diagnostic or laboratory techniques are needed. As the clinical picture changes, you must change the dosage as needed until a balance state is reached.

To do this, which drugs should be used? The logical place to find the answers is the literature. However, loaded as it is with ambiguous and contradicting statements, this makes a true study of each drug impossible. During the past two years, we have investigated thirty-nine of the new drugs. Many of these are highly active and are useful in special cases. For a chemotherapeutic program that you can use successfully, I find that our recommendations of last year are very adequate and should be repeated. Concentrate on one analeptic and one tranquilizer. Study them, know them, use them and understand them clinically—separately and combined. Let me show you what I mean—

Figure 1 represents behavior problems as they walk through your office door. From the shading, one sees that some are outwardly very overactive, others are quite underactive. Most are near normal.

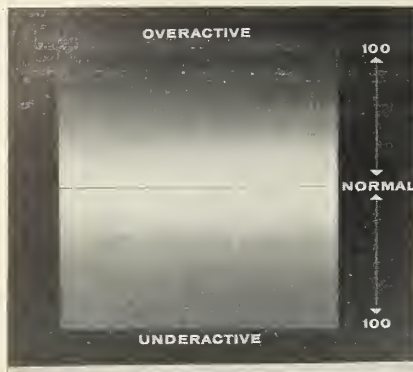


Fig. 1.

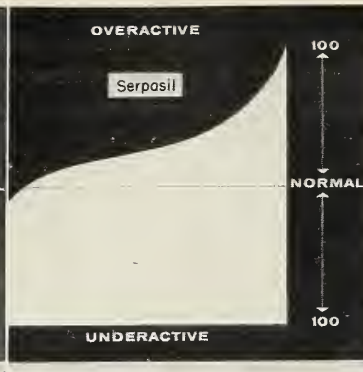


Fig. 2.

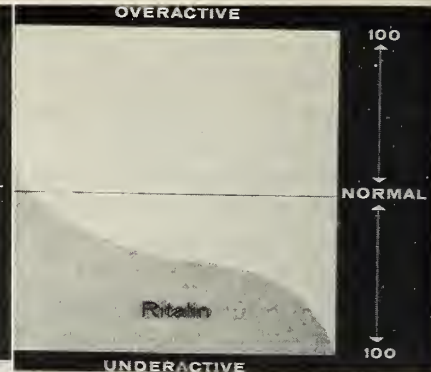


Fig. 3.

If only a tranquilizing drug is used, results will be similar to the dark area shown in Figure 2. The most overactive will be helped most. The less the overactivity, the less they will be helped. For a tranquilizing drug, I use Serpasil, because I consider it the least toxic and the safest to use for increased motor activity and aggressiveness. It has proven best for me with all overactivity, both mental and physical.

If treatment is confined to an analeptic, results will be similar to the shaded area shown in Figure 3. The more underactivity present, the better are the chances for helping the patient.

For an analeptic drug, I use Ritalin, because within therapeutic limits I have found it to be without side effects. It has proven safest and best for me with underactivity, both mental and physical.

Let's go a step further and consider treatment for both overactive and underactive behavior patients. The overactive patients are treated with Serpasil and the underactive patients are treated with Ritalin. From the clear area in Figure 4, it can be seen that there is still a big segment of behavior that is not being touched. If you look at this another way, it is then that you see more clearly how this untouched behavior segment has both overactive and underactive components, each of varying intensity.

It is definitely mixed (Fig. 5). How do you attack it? (Fig. 6). First, you can set up your results as percentages to see how many behavior problems will be responding to Serpasil and how many will be responding to Ritalin, after at least a year. This is quite important because, in any practice, the lasting benefits of the future are far more important than are the spectacular cures of today. Roughly, 10 to 15 per cent of all over-

active patients on Serpasil alone will be doing fine after a year. About 5 to 10 per cent of all underactive behavior patients will be all right on Ritalin alone after a year. We see, then, that at the end of the year, 75 per cent of the behavior problems have not been touched—or will be showing changes from their first improvements.

The reason for this is not an accumulation of the medicines within the patient. It is an actual change within the patient. Where this change takes place with Serpasil and Ritalin, I do not know, but I do know that as the behavior of an individual moves toward normal, there is need for less and less medicine. Most of you know what I mean because you have used Serpasil for some of your hypertensive patients—patients whose hypertension was perhaps the clinical manifestation of increased anxiety or tension. Within a week or two, the blood pressure was down several points on maybe a dose of 0.1 to 0.3 mg. of Serpasil three times daily. The patient felt like a new man. Life was more bearable for him. For the first time in years, he was living. You've heard it—and felt good—until months later when the same patient came in depressed or complaining of always being sleepy. I have seen it happen on 0.1 mg. of Serpasil daily. I have also seen this same patient add 10 mg. of Ritalin twice daily to his daily 0.1 mg. of Serpasil and improve to a better mental and physical level than at any time in the past ten years. Therefore, to treat behavior problems properly, each must be treated individually as a mixture of overactive and underactive components.

To illustrate what we mean, in Figure 7 we have not only placed the two behavior components side by side, but we have also shaded the areas to show how, as the underactives awaken toward

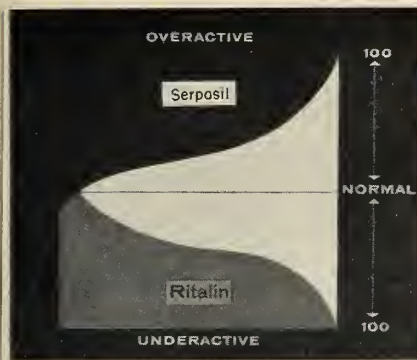


Fig. 4.

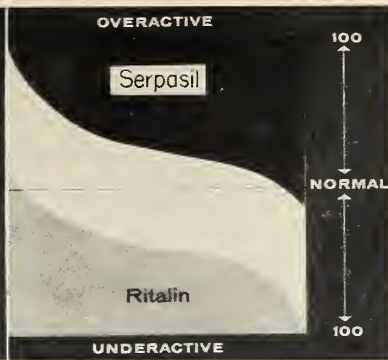


Fig. 5.

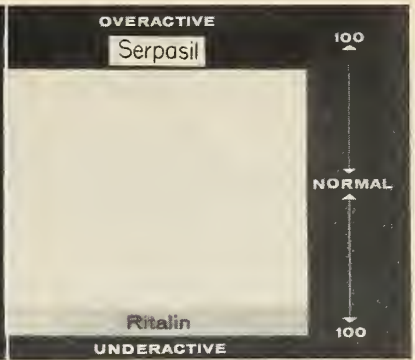


Fig. 6.

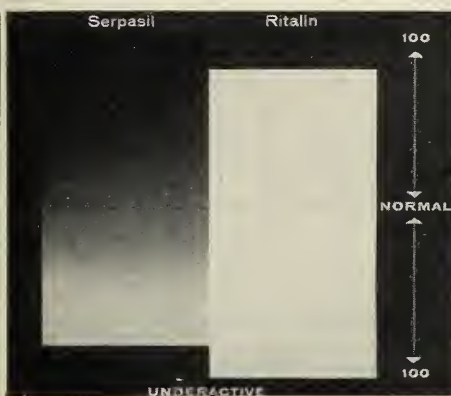


Fig. 7.

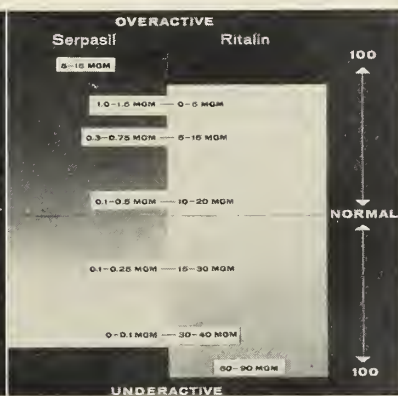


Fig. 8.

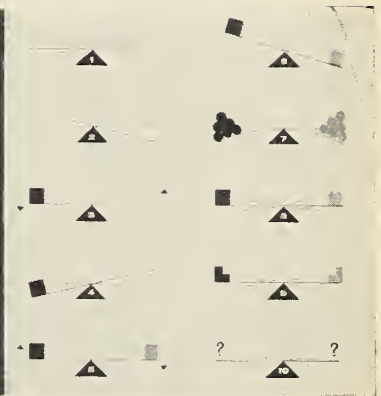


Fig. 9.

reality and the overactives "simmer down," each will not only need less and less of his original medicine, but to arrive at an active tranquility each will need to have the second drug added.

Figure 8 is the same as Figure 7, but with the dosages added. In each section we have used a dosage range rather than a mandatory figure. We did this to stress the individuality of each patient, as two patients with the same clinical behavior pattern quite often require different dosage levels.

Here approximately 15 per cent of the overactive group have no clinically recordable underactive component. This type of patient will require larger doses of Serpasil than any of the others. This dose range is usually 5 to 15 mg. of Serpasil per day, although it may have to be raised with a few overactive cases. Results with this overactive group will be faster and smoother if parenteral Serpasil is used.

A safe rule-of-thumb to follow for parenteral Serpasil is this—"If the patient can be given 7.5 grains of sodium amytal, then 5 mg. of Serpasil can be given. If not, then use 2.5 mg. of Serpasil." Either dose may be repeated every three to six

hours, if needed. On the underactive side, there are approximately 10 per cent who will require 60 to 90 mg. of oral Ritalin a day. This works best when given 20 to 30 mg. three times daily. Using 10 to 30 mg. of injectable Ritalin solution intravenously with this underactive group will give striking results in most cases. They can then be maintained on the oral Ritalin.

It is from these two groups—the very overactive and the very underactive—that state hospitals secure most of their admissions. Proper treatment of this type of patient, therefore, should reduce materially the number of commitments each general practitioner will be forced to make in the future. It is a challenge to good medicine.

In the central group, very few patients will require as much as 1.5 mg. of Serpasil or as much as 40 mg. of Ritalin daily. In fact, the 0.1-0.5 mg. Serpasil and the 10 to 20 mg. Ritalin daily dosage will be used in office practice more than any other, as most patients will not be too far from normal behavior when first seen. Using divided doses will give smoother action. We like a three times daily schedule. The medicine may be

given before, after, or with the meals. It may be crushed and put in the food or beverage, if necessary.

Although we show the range for the combined use of both drugs, only a small part of your treatment will start that way. In most cases, there will be a dominant behavior. If it is underactivity, start with Ritalin. If it is overactivity, start with Serpasil. Then, as the dominant behavior starts to resolve, add small amounts of the second drug. We find that this early addition of small amounts of the second drug—5 mg. of Ritalin two or three times daily to the patient on Serpasil, or 0.1 to 0.2 mg. of Serpasil added to the patient on Ritalin—produces better results and is easier on the patient and the doctor than to do nothing until side reactions or bad effects appear.

To understand better this balance-technique let us consider Figure 9. Behavior is like a teeter-totter. Normal behavior fluctuates, but maintains balance, even though one component may be dominant. It is when one factor, such as overactivity or underactivity, is clinically manifested that we have abnormal behavior. It is the inability of the individual to keep in balance—his inability to live with himself and others—that usually brings him to your attention.

If Serpasil is given in amounts sufficient to decrease the overactivity—would one expect that this overactivity should reach normal and stop? Of course not. It is like putting a rock on one end of the teeter-totter to bring it down—and expecting it to stop at center. Unless the dosage is adjusted in proportion to the patient's improvement, it is only right to expect the drug to continue acting on the overactive component until the negative remains clinically.

Now, if we add Ritalin to the point that this new underactivity decreases, we again cannot expect the behavior to reach normal and stop. It will again go on until the original overactivity manifests itself, even though the patient is on the original Serpasil dosage.

From this we see that we could continue adding to each side as they went up and down; we could add until we exceeded therapeutic limits. Don't do it the hard way; add the second drug when the patient starts to improve. It will take less drugs and less time.

After the patient is balanced for a month or two, decrease both drugs in proportion; that is,

if he is on 1.0 mg. of Serpasil and 20 mg. of Ritalin three times daily, cut the dose to 0.75 mg. of Serpasil and 15 mg. of Ritalin three times daily. Do this every couple of weeks. In this way, it may be possible to eliminate both drugs. If not, you will arrive at the proper maintenance dose.

The cause of abnormal behavior is not always known. There will be times when a balanced patient will be temporarily upset or depressed. The addition of extra amounts of Serpasil or Ritalin for a short time will usually help the patient through these periods.

In this respect, another comparison with the control of diabetes is in order. If the diabetic overeats, he takes more insulin. If he fasts, he cuts his insulin. A similar adjustment in relation to the amount of mental strain, is needed in the treatment of behavior problems. However, the diabetic cannot make these adjustments unless the reason is explained to him. Therefore, for best results in behavior problems, it is necessary to explain to the patient or his relatives the action of each drug, the results expected from administration, and the symptoms which should be reported to you, so that you may adjust the dosage properly in order to reach the desired goal—active tranquility.

This implies a condition wherein the individual is mentally alert, yet calm and collected. It also means the absence of abnormal behavior and the inability of the individual to live with himself and others.

It is at this point of therapy that most patients have left the hospital and returned to society and their loved ones. Consequently, it is at this point that you—the patient's family doctor—can take over through some form of a parole system. We feel this way, because, in most cases, you know as much, or even more, about the patient's environment than we do, and you are more than capable of handling the medicines. Like the diabetic patient leaving the hospital, the mentally ill patient must have good medical follow-up. This is the weak link in our program today. We have been able to increase the number of chronic patients leaving the hospital by 350 per cent. We have also been able to increase the percentage of those that can remain out from 21 per cent to 68 per cent. However, our records show that 92 per cent of those that return to the hospital re-

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Evaluation of the Use of Reserpine in the Psychoses

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THE VETERANS Administration Hospital at Battle Creek, Michigan has 2,055 patients, all male, ranging in age from nineteen to eighty-six years. Ninety-seven per cent have psychotic diagnoses and eighty per cent of these are schizophrenic.

During the past two years Reserpine has been used at this hospital, and great changes have occurred. The time interval that has elapsed is now sufficient to warrant an evaluation of this medication. The use of the drug has been extensive enough to warrant a critical appraisal. During these two years a carefully controlled, subsidized research project evaluating the effectiveness of this drug has been completed. Further, a policy was initially instituted whereby each physician on the staff of the hospital had the privilege and responsibility of selecting patients from those on his service who were to receive the medication. An evaluation of the results obtained by these physicians has been made. All this has afforded a unique opportunity for a clinical evaluation of the use of Reserpine at this hospital.

Many changes that this medication has brought about seem truly amazing. Electroshock is now given only to those patients where it has a specific therapeutic effect, chiefly in cases of acute exhaustive psychoses, in depressions, and to catatonic patients who would require tube feeding. Hydrotherapy in the form of tubs and neutral packs is now used only occasionally, whereas two years ago it was used extensively. In order to accommodate the large number of patients it had to be available both day and night. Lobotomies have been discontinued. Many untidy patients are now continent. The aged and senile are less confused, better oriented, and memory impairment is less pronounced. Many patients who have been on the locked wards are participating in activities of their own selection, and have the privilege of

being on open wards. The period of hospitalization for many patients, who likely would have been discharged ultimately without the medication, has been definitely shortened.

In spite of these great changes and the definite value of this medication in the treatment of these psychotic patients, it still cannot be considered as curative. The improvement most of the patients have made is still very marginal. While many patients show a change in emotional and feeling tone and an attenuation of hostility and anxiety, the psychiatrists have no difficulty in detecting the psychotic process which is basically unchanged. The more acceptable behavior is still very tenuous. Many patients are able to adjust very well in the hospital under a structured environment.

The majority of the chronic schizophrenic patients treated with Reserpine have failed to improve sufficiently to be eligible for early hospital discharge. Those who have left on trial visits or who have been placed in the family care program have needed much supportive therapy.

Some clinical complications from the medication, while not too frequent, can be serious and disabling. A few patients have developed depressive reactions. These have responded well to withdrawal of the medication. We have had several cases of acute vascular collapse. These, however, have responded well to symptomatic treatment. A more serious complication noted at this hospital has been the reactivation of peptic ulcer. Six patients have had severe gastrointestinal bleeding and three have had acute perforations. All of these required emergency surgical treatment. These cases are often difficult to detect because of the peculiar indifference to pain many of these schizophrenics show. Constant vigilance for detecting these complications has been necessary and rewarding. While it is gratifying to see the tranquilizing effect of Reserpine on patients with assaultive, destructive and combative behavior, also the disappearance of the choreiform

From the Veterans Administration Hospital, Battle Creek, Michigan.

movements in Huntington's disease, it is most discouraging to see another neurologic deficit appear in the form of Parkinsonism.

The physicians at this hospital realized very shortly after using Reserpine that it was very difficult to predict which patients would respond favorably prior to giving the medication; therefore, a carefully controlled study of 170 schizophrenic patients was done. Some received Reserpine and others a placebo.* The double blind technique was used. One group of these patients represented the borderline psychotics and those who were in good contact and on an open ward. Another group were the acutely disturbed, displaying periods of agitated violent, combative and uncontrollable behavior. Another group were those often described as "elopers." Some of these were in fairly good contact with reality; many were actively hallucinating and revealed delusional ideation. The fourth group represented the severely regressed patients. They had adjusted well to a structured hospital environment and appeared quite comfortable with their delusional ideation.

The results of this study show that the tranquilizing effect of Reserpine shortened the hospital stay of many of the borderline psychotic patients and those who were in good contact. In the majority of these cases the hospital stay was so short that an accurate evaluation of the change in psychopathology was not possible. In the acutely disturbed patient, the personality disorganization which had become progressively more severe was at least partially halted. There was a definite improvement in conceptual thinking. Hallucinations and delusional idea—were diminished and masked. These patients became better oriented for time, place and person. Their speech was more relevant and the effect more appropriate. The tranquilizing effect of Reserpine is, indeed,

amazing in this group. The eloper became less seclusive, less resistive, less hostile and more cooperative. The chronic regressed patient who was well adjusted to his hospital environment showed the least improvement.

A global evaluation of these patients reveals that changes occur only in specific areas of psychopathology. The response to Reserpine also showed a peculiar selectivity. Some patients made a good response, others failed to make any improvement. Even after completion of the study no definite prognostic sign could be elicited which would indicate which of these patients in a comparable group would improve and which would not, prior to a therapeutic trial with Reserpine.

It does seem logical to infer that this peculiar selectivity and specificity represents a neurophysiologic difference in these schizophrenic patients. This in turn suggests a metabolic disorder, both cellular and humoral in origin. It lends further support to the concept that a biochemical factor is involved in schizophrenia. Some recent research on serotonin is suggestive of the nature of this biochemical factor.

Our experience indicates that some patients respond better to Reserpine, others to Chlorpromazine, others to a combination of these drugs. Some of our patients who have failed to improve on the drugs have subsequently made a very good improvement on insulin coma therapy. Some who have failed to improve on insulin therapy have done remarkably well on further treatment with the tranquilizing drugs. The physical medicine rehabilitation service, special services, individual and group psychotherapy have been more valuable in the treatment program than ever and should be utilized to the fullest extent. It is our opinion that the older forms of therapy should not be discarded. Each patient must still be individually evaluated. Certainly more research and clinical experience in the use of these newer drugs is needed.

*Sandril and the placebo were donated by the Eli Lilly Company.

The history is the backbone of clinical investigation.

* * *

Complete anacidity and a short history, unlike the achlorhydria with a long history, strongly points a suspicious finger towards carcinoma.

It should be regarded as axiomatic that the harder it is to recognize gastric carcinoma, the better the prognosis.

* * *

Addisonian pernicious anemia is often confused diagnostically with carcinoma of the digestive tract.

Management of Chronically Disturbed Patients with Sparine

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SPARINE or Promazine hydrochloride is one of the phenothiazine compounds that has been significantly successful in the treatment of acutely disturbed patients,¹ especially in the treatment of acute alcoholism.² It has not been known to have severe side effects, a fact which has been attributed to the absence of the chlorine radical on the phenothiazine nucleus. Chemically, this is the only difference between chlorpromazine and promazine.

Therefore, we thought it useful to administer the drug to chronically disturbed patients with a twofold purpose in mind: (1) to see whether it would have a significant effect in calming chronically ill patients who had been previously treated with any of the chemical or physical modalities, and (2) to test it for undesirable side effects.

Fifty-nine disturbed patients from the chronic female wards were selected on the basis of having had previous physical or chemical treatment—alone, combined or successively. Thus, each patient was her own control. By the process of random selection, they were divided into two groups. Thirty-one were placed in the Sparine group and 28 in an EST group. This was to act as an additional control. The ages ranged from twenty-six to sixty-four years and the periods of hospitalization extended from one and one-half years to twenty-nine years. Eighty per cent had the diagnosis of schizophrenia. The remainder fell into the categories of chronic brain syndrome, involutional psychotic reaction and manic-depressive reaction.

Prior to treatment, blood pressures, pulse, and temperatures were taken and recorded. Complete blood counts were also performed. Finally the patients were evaluated by the ward personnel. A rating scale was used. It was divided into fourteen subjects, such as sleeping habits, eating habits, sociability, speech, et cetera, covering all con-

ceivable aspects of ward adjustment. Each subject was subdivided in terms of degree of increasing abnormality and numbered. Thus the lower the number (and, hence, the total score), the better the adjustment and vice versa. The lowest score possible was fourteen. This represented a condition good enough for convalescent leave. The highest score possible was fifty; this represented the worse possible adjustment.

The protocol was set up as follows: Each of those on Sparine received 100.0 mg. of the drug intramuscularly daily for four days. Oral medication was started at the same time. Only 100.0 mg. tablets were used. For the first two days, each patient received one tablet at bedtime. This was increased to one tablet twice a day for two days, then one tablet four times a day. Four hundred milligrams a day was arbitrarily set up as the maintenance dose. The amount was to be increased or decreased as the individual required. The tests extended over a two-month period. Complete blood counts were done every two weeks.

Just before administering the intramuscular dose, the blood pressure and pulse were taken and recorded. They were taken again one hour after the injections. In the hypertensive patients, the pressure dropped as much as fifty points; in the normotensive patients the drop averaged ten to twenty points. Thereafter no particular pattern could be ascertained, but there was a gradual, continued decline over the period of a month in about 60 per cent. In the remainder, the blood pressure started to return to normal subsequent to the termination of the intramuscular injections.

There was only one significant side reaction at that time—a rash at the site of the injection. A few patients complained of weakness and drowsiness initially. There were no incidents of syncope. After the first few injections, there was no further evidence of weakness. During the period of injections, it was noticed that most of the patients were quieter and more co-operative, but with the shift to oral medication there was an upswing towards

From Wayne County General Hospital.

The Sparine was supplied by the Wyeth Laboratories.

the former agitated behavior. A few patients did not respond to the intramuscular injections, even after four days, and required additional injections extending up to a month.

At the end of two months the drug was discontinued, except in those patients who seemed to have benefited from it. Both groups were again evaluated by the ward personnel. Twenty-three, or almost three fourths, of the Sparine group showed some improvement. One-fourth was unimproved or worse. Almost identical percentages were obtained for the EST group. Twenty-one, or exactly three fourths of the EST group showed some improvement, as against seven or one fourth, who showed no improvement. However, there was one striking difference. In the EST group, one patient improved dramatically (14.5 point decrease). This was a forty-six-year-old woman with the diagnosis of schizophrenic reaction, chronic undifferentiated type, who is now on convalescent leave.

In terms of side effects, it was noticed that a small percentage of the patients developed a mild leukopenia (for our purposes a white cell count below 5,000). The white cell counts declined appreciably in 17 per cent, but only one fell as low as 2,550. No symptoms that could be associated with this decline were noticed. All the lowered blood counts returned to their former level within a month after discontinuance of the drug. One patient developed a serious macular rash, which, although treated with Benadryl, became worse. It was necessary to discontinue the drug on this one patient. No other significant side effects were noted. In particular, no patient developed seizures which Barsa and Kline³ and Voegle and May⁴ observed independently in their studies.

Summary and Conclusions

Fifty-nine chronically disturbed female patients who had previously failed to respond to either physical or chemical therapy, or both, were divided into two groups on the basis of random selection. Thirty-one were placed in the group to be given Sparine and twenty-eight were placed in the EST group. Thus each patient not only acted as his

own control, but also the EST group acted as an additional control. Complete blood count, pulse, pressure and temperature were taken prior to the tests. In addition, each patient was evaluated by the ward personnel.

The treatment lasted for two months and consisted of intramuscular injections of 100.0 mg. daily for four days and oral doses of 100.0 mg. tablets starting from the first day and increasing to 400.0 mg. daily. This was the average dose.

Blood pressures fell significantly within one hour after the first intramuscular injection. There were no instances of syncope. A slight majority continued a gradual decline during the first month; the remainder returned to normal following cessation of the intramuscular injections. A transient weakness and drowsiness were observed in a few. A rash developed in one at the site of injection, but this faded in time.

At the end of the two-month period, the patients were again evaluated by the ward personnel. Almost three-fourths of the Sparine group showed some improvement; the remainder were unimproved or worse. Exactly three-fourths of the EST group showed some improvement. One of this latter group improved enough to be placed on convalescent leave.

In terms of toxicity, 17 per cent experienced a mild decline in the white cell count, but all returned to normal within a month after the drug was discontinued. There were no associated symptoms. In one case, a macular rash developed that was so severe that it was necessary to discontinue treatment. No other side effects, including seizures, were observed.

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Psychiatric Aspects of Gynecologic Care

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IT MAY NOT be inappropriate to start this discussion of psychiatric aspects in gynecologic practice with a reference to the importance of sex at the very beginning of human life here on earth, and I quote from Genesis Chapter I, verse 27—"So God created Man in His own image—male and female created he them." Man and woman, masculine or feminine, we were brought into the world, and the animals also came in two by two. The biblical writer paid no heed to other species that deviate from the bisexual pattern, such as certain species of snails and mollusca that mature in one hemaphroditic individual the dual potentiality of spermatogenesis and ripening ova. But in the higher species procreation remains bisexual today as it was in the distant past. It is no mere coincidence that our sex necessarily influences the attitudes and attributes, the conditions and conflicts that govern much of our thinking and activities.

Psychiatrists point to three stages in sexual maturation common to men and women. The primary phase extends from before birth to the first few years of infancy, and is characterized by a neuter, ano-oral type of sexual satisfaction. Then comes the second, homosexual phase, to be followed sometime in adolescence by the mature heterosexual era. Such development occurs equally in both sexes, and the basic contours of personality are often directed not only by the satisfactory graduation from the homosexual to the heterosexual stage, but also by the adequacy of the elemental maleness or femaleness of the individual. I have sometimes speculated on why those individuals that appear to excel in any creative art or craft—be it cooking, or weaving, or pottery, music or painting, sewing, or even creating a new coiffure—are almost always males. Pick whatever pursuit you may, through the ages men have dominated the techniques. To women alone, however, even to the lowliest street walker, is given the gift

of creation—the sublime ability to produce a living, breathing bit of life itself. Why should there be any wonder that her life, then, in the third or mature stage of development should be wrapped about the central theme of reproduction, the potentiality for it or her demonstration or rejection of such a God-given power?

If this be true, then, much of the mental as well as physical ill health of the individual woman can be properly understood only in the light of her conscious or unconscious acceptance of her feminine role. The menstrual function symbolizes this role. Disorders of menstruation threaten the personality structure at its deepest level—that of femaleness—and an awareness of emotional factors in women's complaints is recognized by all in the field of gynecology. It is only surprising that in a similar way we don't have a special field of andrology—for the ill health involved in the frustrations implicit in being a man can surely bring forth many conditions that our genitourinary associates, peering through their cystoscopes, may be all too myopic to observe. Perhaps this field of andrology offers a wide-open challenge to the ever-increasing numbers of girl graduates from medical schools in the future years.

Gynecology, then, means the science of women's diseases, and their adequate treatment calls for as complete as possible an understanding of the individual patient herself—her life-situation and her problems. One cannot concentrate only on the surgery of the pelvic organs and their pathology and leave out the pituitary, the thyroid and adrenal glands and the part they play in reproductive physiology. Nor can one overlook the psyche—the substrate that motivates and conditions all our actions and responses. To be a thorough gynecologist demands knowledge of the part played by these three essential disciplines—pelvic surgery, endocrinology and psychiatry. The purpose of this paper is to emphasize the outstanding importance of the psyche in all gynecologic complaints. One of the best ways to illustrate this is, perhaps with a few case reports.

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Case Reports

I would like to present three types of cases: first, one with organic disease whose diagnosis was obscured by the more obvious signs of a neurosis; then a patient with important psychiatric implications in her clearly organic pathology; and third, two cases with primarily emotional disturbances presenting symptoms that suggested a somatic disorder.

We are often too prone to react in an unreasonable way to our patients' personalities, especially when the past history and negative physical findings seem to support the hostility with which we may have labeled the patient a neurotic. Once we have even unconsciously committed an opinion of this sort it may be difficult for us to shake it.

Case 1.—M. P. was a thirty-seven-year-old mother of five who had a hysterectomy in (March) 1956 after a period of observation of over three years for intractable meno-metrorrhagia, having had five previous admissions including four curettages.

At her first admission in 1953, her hematocrit was 32, all the usual studies for blood dyscrasia were in normal range, and the dilatation and the curettage showed normal proliferative endometrium. The almost constant bleeding recurred shortly after, and for the next year hormonal control was attempted but failed. It was established by endometrial biopsy that ovulation generally occurred in relation to monthly increases or "hemorrhages" that punctuated the persistent flow. Progesterone was thus found, as anticipated, to be no help. Testosterone was tried both orally and by injection. A course of Blutene was given. During this time the patient's personality presented so many outstanding difficulties, and there was so little co-operation in the outlined medical programs, that she was seen by our psychiatrist and followed by the psychiatric social worker.

The social history of this well-groomed and physically attractive twice-married girl brought out that she, the fourth of seven children, had always been expected to do all the hard household work. Her menarche was at age fourteen and menstruation thereafter was uneventful. She married at seventeen and had her first child in a year. Her husband was killed in an accident a year later. She left the child with her mother and came for work to the city. A sister also came against her wishes and she had the police force the sister to leave town for promiscuous behavior. Later on, the same sister is blamed for a court action that separated her from her oldest child, who was then brought up by an aunt. She married again, a bartender, and had four children in the next eight years. Her home life has been one of violent quarrels with her neighbors as well as with her husband. He is said to accept only two of the four children as his own. Her personality was summarized by the psychiatrist as demanding, sarcastic,

belligerent and infantile, with many hysterical traits, yet seductive and flirtatious. She showed hostility to all those she dealt with; at home she would lock herself in a closet or resort to face-slapping during violent arguments. She was afraid of further pregnancies and used the excuse of her bleeding to deny her husband, or else a compulsive and feverish obsession to clean the house, leaving her too tired for sexual activity. Likewise, the attempts to gain her co-operation in clinic programs were repeatedly upset by missed visits, either because she would say she was bleeding too hard to come in for the planned injections, or she was too tired, or had to clean house that day, and so forth. The psychiatrist's opinion was that the major causes for her anger and hostility were too complicated and she was too disturbed for psychotherapy to offer any help, but that the social worker could give her some supportive treatment.

For a period of six months her bleeding was relatively controlled, during which time she leaned heavily on a sympathetic resident and the social worker. When the resident left the hospital, however, the metrorrhagia returned. We felt that she represented a complicated emotional problem centered on fear of pregnancy and unresolved hostility to her feminine functions; yet, because she was ovulating, an admission was advised for another dilatation and curettage to rule out "irregular shedding" of the endometrium. At this admission, she showed normal secretory endometrium, but a medical consultant found her serum iron to be down to 20 gamma per cent (with a normal minimum of 80). Her hematocrit was 27, and we reversed our diagnosis of primary emotional causes in favor of the tentative hypothesis of prolonged serum iron deficiency and depletion as the major explanation of menorrhagia. She was given a total of 2,400 mgs. of iron intravenously, and with transfusions her hematocrit was brought to 37 after two weeks. For two months she had less severe menstrual flow, then, in spite of an acceptable serum iron level, her hemorrhage recurred. Again, we were forced to conclude that her psychiatric status was paramount; she was readmitted for treatment of her blood-loss anemia. After considerable discussion and further interviews with the psychiatrist, a hysterectomy was chosen as the best definitive treatment, although pelvic examination was still essentially negative. It was during this experience that her infantile behavior, her antisocial feelings and helplessness were brought out. She did quite well, and one month after the operation was doing a full schedule of home work, albeit with many arguments and rages.

Comment.—This, then, appeared at first to be the case record of an unhappy, maladjusted mother of five, poorly equipped to handle the burden of wifehood and motherhood, who seemed to have developed uterine bleeding as a solution to her fears of further pregnancy, in spite of a fairly normal endocrine status. Our confidence in the psychiatric etiology of this was shaken by the demonstration of a severe deficit in her serum iron,

but restored by the recurrence of bleeding after the deficit had been made up. In spite of the presumed emotional etiology, hysterectomy was advised eventually as the best solution to her problem. At operation, a different answer was found. She had diffuse adenomyosis which offered a reasonable organic explanation for her prolonged bleeding, a pathologic entity never considered because of the emphatic, repeated display of emotional insecurity and our too ready diagnosis of her as a hopeless neurotic.

The next case represents those whose organic disease is sufficiently confused by emotional factors to interfere with the optimal therapeutic program.

Case 2.—Mrs. A. A., was a forty-eight-old married woman with three daughters, who was first seen in 1952 in the clinic complaining of bladder weakness. In addition to cystocele, she was found to have large fibroids. Since there had been no hemorrhage, operation was advised, but considered elective, and she was urged to make an appointment within a few months. She did not return, however, until uterine bleeding of seven weeks' duration occurred a year later, when she fainted, became scared, and at her examination showed a hemoglobin of 10 gms. per cent. The cystocele had increased, and the fibroids were larger, and she promised to come in for hysterectomy in three weeks, but missed her appointment because, she said, the small store that she helped to manage was too busy at that time.

Three months later on her return, we learned that her twenty-nine-year-old daughter had just undergone a mastectomy for carcinoma and the fear of malignancy, rather than persistent hemorrhages, had driven Mrs. A. A. to come back. She was given an admission appointment for the following week but failed to keep this date. Four months later she again returned and a 6 cm. cystic structure was felt for the first time in the right vault, independent of the fibroids. Unreasonably, she then wanted an operation done the very next day. She did come in to the hospital in ten days and psychologic tests preoperatively demonstrated the conflict between her fears of the operation and her fears of cancer. Her only defense had been to turn and run away. Finally, through her daughter's crisis, she found she could master the worry about surgery by giving way to the more overpowering fear of malignancy. Through her operative convalescence, an almost symbiotic relationship between mother and daughter was observed, with our patient rather passively enjoying and taking part in the daughter's acting out with hostility her mother's suppressed fears of going crazy. Actually, the removal of a dermoid cyst and large fibroids was attended by a surgical uneventful recovery.

Comment: Little need be added to this rather classic case of a woman who suffered severe hemorrhages for four years from fibroids because she be-

lieved, first, that she would lose her mind following hysterectomy, and, second, that she had cancer anyway and operation would be futile. We were unaware of the daughter's controlling influence until it became clearly apparent that it was the younger woman who realistically faced mastectomy and lived through her operation, that convinced Mrs. A. A. to follow through with her own appointment for surgery.

Finally, the next two cases are from those whose outstanding disorders are psychologic, but presenting somatic symptoms that primarily brought them to the gynecologist.

Case 3.—Miss S. A. was a twenty-five-year-old single girl of Greek Orthodox extraction who entered the emergency ward at night complaining of right-sided abdominal pain of twelve hours' duration. She had a leukocyte count of 15,000, a fever of 101° F., and tenderness localized by her in the right lower quadrant and in the right vault on pelvic examination. An operation for acute appendicitis was performed that night. Exploratory laparotomy was entirely negative, however, except for noting an acute hyperemia of the Fallopian tubes. She was seen postoperatively by the psychiatrist in an effort to understand better the background in this case for the error in mistaking salpingitis for appendicitis.

This attractive dark-skinned girl quickly admitted to her short temper, irritableness and "nerves," which she blamed on a mother who continually badgered her to get married but scolded her for being out after ten o'clock. Her past history revealed chronic indigestion, and a normal menstrual cycle till the last flow, ten days before admission, which had been preceded by an unusual discharge, and continued longer than usual. She had been going out with a married man of a different racial origin and, although there was no hope of marriage, she had recently had sexual relations with him. Only very recently a girl friend of hers had become illegitimately pregnant, and had been ordered out of the house of her mother. The mothers of the two girls had discussed this action, and Miss A.'s own mother had said she would do the same if any of her three daughters disgraced her in this way. Thus it was that the patient became subconsciously fearful that the unusual flow preceding her admission, followed by a fever and abdominal pain, was probably a consequence of a pregnancy of her own. Unable to formulate this fear, yet desperately worried over the consequences, she apparently localized her abdominal pain to the appendix region. Postoperatively, cervical cultures were found positive for a Neisserian infection.

Comment: No valid criticism need be sustained for performing the negative exploration in such a case where the risk of perforated appendix seemed greater than the risk of the laparotomy. In retro-

spect, one may argue that the history of sexual activity followed by discharge, an unusual period, then fever and abdominal pain should have provided enough suspicion to await cervical cultures. When the strict orthodox upbringing and the coincidence of the girl friend's illegitimacy were brought out, one can readily understand the motives behind this girl's anxiety and the quick cooperation with the night resident's suggestive examination that pointed towards an acute appendix as a face-saving solution.

Case 4.—Miss M. E. was a twenty-two-year-old student nurse who came for relief of her monthly cramps which were so disabling that she was falling behind in her school work and was afraid she could not graduate with her class. For the first thirty months after menarche at age eleven, she experienced no menstrual pain, and her mother would ask her "any cramps yet?" When she was fourteen or fifteen, she began to have severe pain, nausea and vomiting that persisted with regularity to the time she was first seen. Codeine alone was found helpful. Other than a second degree retroversion, examination was essentially negative. She was given two injections of 10 mgs. of estradiol propionate early in her cycle, and for the first time in eight years experienced no menstrual discomfort whatsoever. Ovulation was then allowed to recur, and this was followed, as anticipated, by the usual disability "worse than ever before." Oral stilbestrol, 1 mg. for three weeks failed to produce any estrogen withdrawal flow. She was then started on the "stepped-dose" regime first suggested by Brown and Bradbury, receiving 2 mgs. of stilbestrol the first week of her cycle, then 4 mgs. for a week and finally 6 mgs. for a week. This regime was repeated for three months in a row with complete relief and psychologically acceptable uterine flows, and then the fourth month ovulation was allowed to occur. Neither papaverine, trasentine, valoctin or novatrin were at all helpful when she had her dysmenorrhea. For the final year of her training, however, for three out of every four months the "stepped" stilbestrol regime eliminated the pain and the absence from work, and she felt grateful that she was thus able to graduate on time.

Shortly after graduation she was treated in the hospital for acute peptic ulcer symptoms which yielded to medical measures. In the spring of the next year she married. After a year and a half of the concentrated stilbestrol treatment she was told that this must be terminated, and that the choices for her were either pregnancy or a pre-sacral resection. She felt too financially insecure to have a baby and did not want to stop working to have the operation. She compromised on the use of stilbestrol only every other month, and agreed to the condition imposed on this decision that she should start psychotherapy.

It was difficult for her, at first, to gain confidence in the therapist and accept the idea that she might have pertinent emotional conflicts. After a relationship was established, she described how she had to give in to

her intense pain in order to get her mother first, and now her husband to take care of her as a helpless child. She claimed she wished she did not have to work and could afford a baby. Later on she expressed her resentment toward the mother for pushing her into growing up too fast and her dissatisfaction in the childishness of her husband, thus placing too much responsibility on her shoulders. She also felt that her dysmenorrhea had served as an outlet to insure her the kind of care she missed as a child. In these interviews, she began to realize that she was taking refuge in her husband's inefficiency as the excuse for her feeling that she was not yet sufficiently mature to be a mother. Nevertheless, she became aware of a deep desire for a child. Seven months after starting this therapy she voluntarily gave up all further estrogen treatment. Her cramps had decreased sufficiently so that they no longer kept her away from work. Her interest in accepting the responsibilities of pregnancy continued to increase and she was very pleased in five months to become pregnant. Delivery was uneventful; she was happy looking after the child and grateful for the therapist's help in reaching a decision to give up the hormone treatment and become pregnant. It is of interest that she still continued to have cramps after the baby arrived, yet these were not severe, and the following year she became pregnant again.

Comment: There is little doubt that the rather massive stilbestrol treatment did give this girl the chance to conclude her training that was threatened by her disabling cramps. The inevitable result of the painless anovulatory flows was to make her dependent, almost addicted to the estrogen. Further one may well wonder whether the activation of her ulcer leading to a hospital admission may not have been a somatic outlet in another form for her conflicts, once the monthly cramps had been taken away. She was, however, intelligent enough to make full use of the therapy interviews, and it was rewarding to note her progressive improvement, her voluntarily giving up estrogens, and her happiness in finally becoming a mother.

Discussion

These cases, of course, are not in the least unusual; every one with experience of the clinic or office practice of gynecology can reduplicate them or their like many times over. One cannot squarely meet this challenge by refusing to recognize its existence. The major problem for us lies in how to deal adequately with it. What steps can be taken to weigh in the balance the significance of emotional conflicts in gynecologic complaints?

First, and most important, there is no single

therapeutic approach that can offer as much success for all functional disorders as the deep concern, wise guidance and sympathetic understanding that the dedicated clinician can devote to the patient herself and her individual problem. This means a careful history that includes background data on family and siblings, the anxieties, ideals and hates of childhood and adolescence. This takes time. How few of us in a surgical specialty have the time and the interest to try to learn about our patients in this way! How little our training has prepared us to be able to bring some order out of the chaos of irrelevancies that may pour out during the first examination! The best we can do most of the time is to grasp those significant danger signals that put us on our guard to think twice before we schedule an elective operation, and to insist on further knowledge before deciding on an irreversible therapeutic course.

If we are fortunate to have the close collaboration of a psychiatrist, many a needless operation may be avoided entirely and other elective procedures can be planned with optimal chance of inflicting the least psychological trauma. I am constantly impressed by the abundance of ordered facts obtained in an hour's interview by the skilled and experienced psychiatrist. As an added aid, I am deeply indebted to the knowledge provided by our consultant psychologist through the use of projective tests, the well-known Rorschach, the thematic apperception test, draw-a-person and Sentence-Completion tests. Finally, in surgical cases, we have been rewarded by studying the pattern of a patient's recovery from anesthesia as a prognostic sign of their future convalescence. Five minutes or less of the surgeon's time spent in the recovery room will give him a telescoped view, as it were, of the way his patient will be able to handle the postoperative period. Those that moan and groan, thrash about, demand more medication, resent and reject all proffered help while in the twilight zone before full conscious mastery returns—such patients are most surely going to be difficult to handle, aggressive, complaining, infantile and dependent. The others who seem to summon up some deeper strength from their previous life experiences to accept the discomfort with confidence that they are obtaining all possible help—these patients will get well in progressive, predictable manner.

In conclusion, I would like to make a few re-

marks about the importance, obligations and responsibilities of our specialty in relation to the health of our nation which, as the American Medical Association repeatedly reminds us, is the best in the world today. This is certainly borne out by statistics on infectious diseases, and various mortality rates. But there are few nationwide or worldwide statistics on the incidence of gynecologic conditions aside from malignancy. A more revealing index of the health of America's women is provided by a truly disturbing accounting of sexual unhappiness, broken homes, illegitimacy, septic abortions and sterility. It is impossible to obtain accurate figures, but estimates indicate, for instance, that 20 million Americans are battling with the frustrations of infertility; ten million others have been involved in divorce action. Each year there are over 100,000 children born out of wedlock, and the figure of 300,000 criminal abortions annually has been considered a conservative guess. The numbers of sexual deviates and delinquents are unknown. Surely such figures speak eloquently of a shocking degree of sexual immaturity and inadequacy, of maladjustment and irresponsibility of parents, a disturbing measure of mental ill health of the women of our nation.

I do not believe the medical profession can shrug off responsibility by claiming this state of affairs is the concern of parents, church, or schools. I think that our own specialty is particularly concerned. In the age before specialization, the family doctor was the guardian, teacher and friend of his intimate clientele. He knew the family background, the hopes and worries of young parents whose children he delivered and whose parents he saw buried. With the priest or pastor, he stood as a bulwark against abortions, divorce, and illegitimacy. Today obstetricians and gynecologists are perhaps best able to fill the same position. Too often, however, obstetric or gynecologic care is limited to the technical problem of the difficult birth or pelvic repair. We are dealing daily with the most intimate aspects of our patients concerning their reproductive activities. It seems to me we are obligated to try to face squarely the frustrations and emotional problems that enter into almost all gynecologic complaints, as exemplified in the case reports given here.

This is not a plea that gynecologists and obstetricians should think themselves into the position of

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Medical and Psychiatric Collaboration

Importance and Possibility

By Kenneth E. Appel, M.D.
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MENTAL HEALTH is the ability to meet and handle problems; to make choices and decisions; to find satisfaction in accepting tasks; to do jobs without avoiding them and without pushing them on to others; to carry on without undue dependency on others; to live effectively and satisfactorily with others without crippling complications; to contribute one's share in life; to enjoy life and to be able to love and be loved. This is not just a matter of chemistry but of training, education and practice in social relations.

Medicine and technology are perhaps the glories of our civilization and culture. Possibilities of industrial production are unlimited. The opportunities of leisure, the arts, physical recreation, the enjoyment of nature, friends and the devotion to others in nonremunerative activities has never been so great. The possibility of freedom from disease has never loomed so bright.

But what on the debit side? The darkness of the depths and recesses of mental illness does not receive the light, the warmth, the help of human understanding which we possess, nor the interest of fellowman which is healing, nor the financial resources without which adequate treatment cannot be given. The plight of the mentally ill in our public hospitals is catastrophic, both financially and from the point of view of the suffering of patients, families, relatives, children—the future citizens. Six or ten million dollars for research in mental illness is small change compared with 180 millions for general medical research, when 51 per cent of the hospital beds of our country are devoted to mental illness, when only 5 per cent of doctors are looking after patients in these beds, and when there are eight to twelve million people in need of psychiatric care. A five billion dollar financial involvement and burden yearly should not be treated lightly. Twelve million

children will sometime in the course of their lifetime be relegated by our society to mental hospitals. That is larger than the population of Norway, Sweden, Denmark, Switzerland, almost a quarter the size of England and France. Can we afford such complacency? These are ulcers in our social body that psychiatrists believe, in significant measure, can be healed and even prevented. We ask you and society to help in the healing.

The form and appearance of the American population is changing. Medicine through its triumphs has enabled people to live longer. There are thirty-three million people over fifty years of age and seventeen million over age sixty. Yet, American society has not looked with warmth and favor on older people. America is the country of the youthful, driving successful people. Industry has not yet made places for the aging population. Industry thus is in cultural conflict with medicine. Crowding and urbanization have made it difficult for the older people. Crowded nursing homes are not the answer, and neither are mental hospitals to which many of them now are sent. Enfeebled intellects in the elderly should not be met by mental hospitals. Unfortunately, this is the drifting, complacent outlet or terminus in many instances. Some mental hospitals have 30 per cent of their population in the elderly arteriosclerotic and senile conditions. The aging population does not need primarily psychiatrists and physicians. They need nurses, of course, new kinds of social workers, new types of counsellors and visitors, vocations, hobbies and recreation.

The extent of emotional and mental illness and its problems is significant and on the increase. The statistics at present are that one out of twelve babies born in this century will suffer severe emotional disturbance so that at some time of life it may enter a mental hospital. It is estimated that there are between nine and thirteen million people with nervous, mental or emotional troubles. There are a million patients in our six hundred mental hospitals each year. The resident popula-

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tion is about three quarters of a million. Admissions are around 350,000, of which over 100,000 are re-admissions, with over 200,000 new cases. A quarter of a million patients are discharged each year. This figure is increasing, as are also the admissions. Increases seem to be occurring in the senile and arteriosclerotic groups, the alcoholic and probably also the schizophrenic. There are, of course, no figures on the neuroses in our population nor on the psychosomatic disorders, nor character neuroses or psychopaths. Halliday spoke of the lessening in Britain and Scotland of various social "evils" before the last war, such as improper feeding, impure milk, contaminated water, food which was not fresh, and poor housing. There has been improvement in the death rate, infant mortality, life expectancy, decrease in infectious diseases and increase in height and weight of children. On the other hand, he felt that the psychologic health had been worsening. As indices of community psychologic ill health or social ill health, he pointed to a rise in the infertility rate, the suicide rate, the noninfectious arthritic rate, the gastritis-peptic ulcer, exophthalmic goiter and diabetes rates.

There are 17,000 suicides annually in the United States. There are 7,000 murders. There were 1,800,000 eliminated from service in the last war because of emotional difficulties. We have 3½ million problem drinkers. There are 300,000 severe alcoholics. There are 50,000 narcotic addicts. There are about two million serious crimes committed each year. Over a quarter of a million children pass through the juvenile courts each year, and the delinquency rate is rising. There are almost 400,000 divorces.

Costs are staggering. Approximately one third of the budget of one of our larger states goes for the care of the mentally ill. State governments pay 560 million dollars per year; the Federal government spends 598 millions, including pensions, for psychotic conditions. This makes a billion dollars. Add one billion for loss in tax dollars and three billion for loss of productivity. This makes the mental health bill of the country five billion dollars, which compares well with the larger businesses of the country. For military research, the figure has been a billion dollars, for medical research 180 million, for agricultural research 100 million, for mental health research from 6 to 10 million per year. The salaries

paid psychiatrists in mental hospitals are woefully inadequate. As to treatment, what can we expect if the figure allowed for doctors' salaries, nurses, attendants, heat, light, plumbing, painting, food and raiment is around \$3.00 per day compared with \$12 to \$18 a day in general hospitals? Of course there are snake pits. Public education about treatment instead of herding, regimentation and custodial care is necessary. If better facilities are not provided, certain groups will move in and demand better socialized medical care.

Mental hospitals are piling up their population at a rate of 16,000 a year. In ten years the cost of increased facilities for these added patients will be 2 billion dollars. The population is increasing at the rate of 10 per cent in ten years, and the mental hospital admissions have increased 40 per cent in the same period. We are on a treadmill. New methods of handling this problem can and must be developed. A hospital providing intensive treatment for acute cases in one of our states kept patients thirty-two days as compared with 676 days in the usual state hospital. Costs were lessened in the acute hospital to \$281 per patient compared with \$1,100 per year on the average in State hospitals.

The overcrowding and understaffing in state hospitals are tremendous. In a recent survey of one of the state hospitals in a prosperous area of the country, the hospital was found to be 49 per cent overcrowded. It was 75 per cent understaffed in doctors and registered nurses, and 50 per cent understaffed if nurses and attendants were considered together. It was figured that if doctors covered the patients each day, each patient could be seen for twenty-one seconds. Other comparisons were striking. If we take the figure that one out of twelve children will enter a mental hospital some time in his life, that means that 8 per cent of 150 million people, or twelve million citizens of our country, will at some time be patients in mental hospitals. This means that we are going to carry a nonproductive population larger than countries like Switzerland, Belgium, Norway and Sweden. This represents not just a medical challenge, but a social, economic and humanitarian one. It certainly points to the importance of research.

This may not be just a question of money, comfort or relief of friction and frustration. It may be a question of survival. It is said that in fifty years the United States will have a population

of 200 million people, while Asiatic countries will have two billion. We cannot afford to neglect our natural resources, and twelve million people in mental hospitals in a generation are a wastage of resources. There are indications that not only our concepts of mental illness may need changing, but that also our methods of treatment and prevention need to be reviewed, revised and reconceptualized.

"The statistics of severe psychiatric disorder form but a segment of the mental health problem. They form the background. . . . Every other bed in the nation is occupied by these patients. Stress, strain and emotional upheaval are the substance of which human life and history have been made.* As Dr. Braceland says, it may well be that they are more frequent and oppressing today than ever before, with the competition and mobility of modern society.

"It is not only the psychiatrist who must contend with these forces and the aberrations they bring. 'No man is an island, intire of itself,' nor is any profession or industry or any union of men. The welfare of society is everybody's business, and mental health subtends that welfare as powerfully as any other factor generally recognized to do so. The exact statistics of overt psychiatric disorder, of crime and delinquency, addiction and other social illnesses are legion. In addition there is a mighty aggregation of masked emotional disturbances contributing to disorder relationships, work dissatisfactions, absenteeism, accidents, marital and family problems and physical illness itself."

These are psychiatric problems, but they are also social and economic ones. They are a medical responsibility also. Nine or ten thousand psychiatrists can never do the psychiatric job of this country. If one-half of them are in state hospitals, it leaves four thousand psychiatrists to take care of the extra-mural psychiatry of a country of 160 million people. One thousand psycholanysts cannot make much of a dent in this problem except through teaching, research, public education and the creation of optimism and public demands for more psychiatrists and facilities. If eighteen to twenty million patients go annually to general hospitals; if over fifty million go to out patient departments, then there are seventy million people in our country who have close contact with physicians, not including the private practice of medicine. If 10 to 20 per cent of these have important and even etiologically significant emotional contributions or complications, then one

must add the millions of those seeing private general practitioners, internists, pediatricians, to the twelve million psychoneuroses and psychoses who are in our general population—twenty million people whose feelings, and emotions, are tremendously important, contributing a hazard and handicap to the pursuit of life, liberty, and the enjoyment of health and satisfying activities. In many, perhaps most of the psychologic or psychiatric problems of society, others than psychiatrists must carry the treatment. This throws tremendous burdens especially on the general practitioner, who always has been and should be, I believe, the backbone of medicine.

But medicine is too broad, too complicated, for the individual physician. He needs the collaboration of others—comprehensive medicine requires an interdisciplinary approach—general practitioners, internists, psychiatrists, psychologists, social workers, nurses, health aids, public health and visiting nurses, volunteers, counsellors and clergy. We probably need new professions we have not dreamed of.

If feelings and emotions are so important in the practice of medicine, we need more collaboration of general practitioners and psychiatrists who are supposed to be experts in feelings, emotions and psychodynamics or the experimental factors modifying and motivating behavior.

Frustration of basic needs produces tension whether in the individual or society. If tensions are overwhelming they produce catastrophic illness, such as mental illness, psychosomatic disease or alcoholism. Typhoid fever, tuberculosis and now polio have been largely conquered. Cancer, coronary disease and strokes are the killers. The latter two are tension illnesses, and who knows but that destructive disequilibria in the body may not be basically involved in cancer? Arthritis, high blood pressure and stomach ulcers are on the march. They are disabling forces in our society, in our happiness, in our mental health. They are in part, certainly, tension diseases. It is in these areas that internal medicine and psychiatry overlap and where collaboration seems most profitable.

How treat emotional disturbances, the more or less permanent exacerbations of feelings such as we find in anxiety states, neuroses, many psychosomatic conditions, personality disorders, and some psychoses?

Psychotherapy, the guidance of one individual

*The Mental Health and the Community, an address given at the Mental Health Association of South-eastern Pennsylvania, May 28, 1956.

by another when there are emotional disorders, has certain principles which many physicians have known intuitively, and others from experience. It is not esoteric. It involves the healing effect of interest, the relaxing influence of patience, the help of discussion, and the release of talking out and getting things off one's mind.

Psychotherapy is not merely an intellectual exercise as so many think, nor a matter of will power. It is not a transference of ideas from doctor to patient. It is not merely the development of insight. It is not an argument. It is not exhortation or a lesson in morality. It is not a battle of wills. It is not an opportunity for the doctor with his superior wisdom to impose his ideas on the patient, make him feel inferior or humiliated. It is not an occasion for the doctor to express his anger at the patient because of his own frustration in treating the patient successfully.

Psychotherapy is an experience, and as such it is a process of conditioning and growth. Like growth much of it goes on unconsciously and automatically. An automatic readjustment of the emotional and social forces (which have been conflicting and in tension) takes place. Psychotherapy is a social experience, that is, a relationship with a doctor who wants to help his patient. It is an experience, again I repeat, not an intellectual exercise, in which the doctor's attitudes toward his patient are the most important levers of therapy. The doctor should bear in mind certain needs of all people: the need for new experience, for security, for respect and a feeling of individuality, and for responsiveness and understanding from another human being.

With the exhibition of attitudes of patience, consideration, respect and responsiveness the patient will gradually identify with the doctor. The doctor has a scientific, objective approach to overwhelming situations and conditions. He is not overwhelmed. He knows what to do. He has plans of attack, through asking relevant questions and exhibiting certain attitudes. The patient absorbs this point of view through identification with the doctor, and gradually learns to meet problems and difficulties by asking himself the same questions, and using the trial and error approach, with repetition and practice.

The doctor sets the stage where *his* attitudes permit the release of malignant emotional tensions. When understanding of the complexities

of the human organism is so much beyond our ken, there is a place for humility.

But getting well is more important than complete understanding of all the causes of the illness. In this connection, may I quote from Lord Grey: "Nothing so predisposes men to understand as making them feel that they are understood."

Understanding, understanding of some of the important concepts of modern psychiatry, of the nature of emotional and mental illness and etiology, can be of greatest influence. Pavlov and Cannon have introduced important concepts for medicine as well as psychiatry. So has Selye. Stress is inextricably interwoven into life. Freud has made more specific the implications of family influences and childhood reverberations into adult pathology. The work of Hebb and his co-workers at Montreal, from the physiologic point of view, forces on us new concepts of "mental" dysfunction. Isolation from the support of customary sights and sounds (stimuli) can produce psychopathology, for example, hallucinations, paranoid tendencies and delusions as are found in the mentally ill or after the ingestion of toxic substances such as mescaline or lysergic acid. Gantt, Pavlov and Liddell have produced neurotic animals by placing them in situations where training and discrimination conflict, and uncertainty and threats continually present themselves. The fascist and totalitarian brain washings and maneuvers to break ego function have used these methods.

Hebb, Liddell, Pavlov, Gantt, Cannon and Selye introduced new concepts of pathology, stimulation to our understanding, and a challenge to our research and therapeutic resourcefulness whether physiologic or psychologic. We are in a new world in psychiatry and medicine just as atomic science has introduced a new era in living and international tensions. As Toynbee asks, "Can we develop adequate response to the challenge?"

The discovery, mobilization and implementation of new resources in people, whether by chemistry and ataractics, kindness or constructive cooperativeness, are important. Probably many more people have recovered from serious mental and emotional illnesses by ministrations of friends and relatives and perhaps the fortunate turn of circumstances than we have any idea of. There is probably a whole realm of psychiatry beyond that of known statistics.

Research in psychiatry can be stimulated and

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Value of a Department of Physical Medicine and Rehabilitation in a County Hospital

By Stanley Olejniczak, M.D., and
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PHYSICAL medicine and rehabilitation is one of the newest medical specialties and is recognized as an integral part of medical practice. The concepts and techniques of the specialty are now being taught in many of the medical schools in the United States. The American Board of Physical Medicine and Rehabilitation was established in 1947. Growth of the specialty was accelerated during World War II when physical medicine became a major service in the hospitals of the armed forces and in other governmental institutions.

Physical medicine employs physical agents in the diagnosis and treatment of the disease. As the specialty has developed, it has come to include the fields of physical therapy, occupational therapy and rehabilitation.

Physical therapy utilizes physical and other effective properties of light, heat, cold water, and electricity and employs different forms of therapeutic exercise, massage and manipulation.

Occupational therapy is medically prescribed. It not only tends to improve the functional ability of the patient, but also gives him a knowledge of productive hobbies and trades.

Rehabilitation involves teamwork. It employs various forms of physical medicine and psychosocial adjustment and retraining. Its goal is to achieve the maximum functional independence and to prepare the patient physically, mentally, socially, vocationally and economically to lead the fullest life possible within the limits of his disabilities.¹

There is a growing need to establish more departments of physical medicine and rehabilitation in institutions caring for the chronically ill and disabled. Recent advances in medicine and surgery have been accompanied by a steady increase in the number of permanently disabled people

whose lives are saved. With saving of increased number of lives, life expectancy has increased. Two thousand years ago the average length of life was about twenty-five years. At the turn of the century it was forty-nine years. Today it is sixty-six years. In 1900, one person in twenty-five was sixty-five years of age or older; it is estimated that in 1980 the ratio will be one in ten.²

In 1910, 26.5 per cent of the nation's population was over age forty-five and required more than one-half the nation's medical services. By 1980 it is estimated that the number of persons over forty-five will constitute nearly one-half of the population.²

The increasing number of older people in our population makes the problem of chronic disease continually more pressing. It is estimated that there are over seven million persons in the United States disabled by diseases of the heart and arteries; 6,850,000 with rheumatism and arthritis; 2,600,000 with orthopedic conditions.³

During World War II, 19,000 amputations were performed among our military personnel but over 120,000 major amputations were performed during the same period among our civilian population.³ It has been estimated that 2,500 men became paraplegic as a result of the war, while 15,000 civilians became paraplegic during the same period.⁴

Since the majority of patients in a county hospital are in the older age group and chronically ill and disabled, it would seem extremely important that a department of physical medicine and rehabilitation be established in these institutions. This new medical specialty concerns itself with dynamic medical and psychosocial care. Many chronically ill and disabled patients who receive such care are restored to a high level of physical and mental function. Although a department of physical medicine and rehabilitation in a county institution would provide treatment for patients with acute conditions, it is mainly concerned with

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ACTIVITIES IN THE DEPARTMENT OF PHYSICAL MEDICINE AND REHABILITATION

rehabilitating patients with chronic disease. The department could furnish therapy that would lead to return of a normal life in the community, of a significant proportion of the chronically ill and disabled, now vegetating in our county institutions; at least it could develop in the minds of many of these patients a higher level of self-sufficiency and independence. Patients sent for custodial care could be screened on admission to determine if they might be rehabilitated. Successful screening procedures and proper rehabilitation techniques would reduce the cost of care of these patients and lessen the demand upon the limited number of professional personnel.

A department of physical medicine and rehabilitation in a county hospital could conduct educational programs with actual demonstrations to stimulate agencies and organizations in the community to develop social services and work opportunities for the disabled. By educating the community to new concepts and methods of rehabilitation it should make it easier to return larger numbers of patients to the community to become self-supporting and self-sufficient.

In the Department of Physical Medicine and Rehabilitation at Wayne County General Hospital, the major objective is complete physical rehabilitation, which means training the patient in the activities of daily living for complete functional independence.

In this program the psychosocial problems are investigated and, if the patient is employable, arrangements are made, in conjunction with the Office of Vocational Rehabilitation, for vocational training or for job placement. If, however, a patient in the older age group does not desire to work or if employment is not feasible, the home situation is explored and the members of the family are properly informed of the disability and, in many instances, patients are accepted by their families after completion of the program in the Department of Physical Medicine and Rehabilitation. In every case in which the home situation is favorable, even if the patient is severely disabled, the family is informed of the progress of the patient and the possible date of his discharge from the hospital so that the proper arrangements can be made in advance for taking the patient back

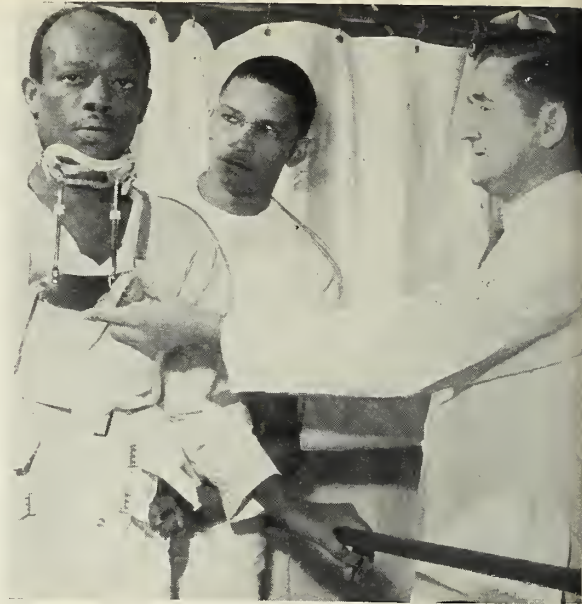
into the home. We try to stress the role of the relatives in meeting the needs of the patient. Even if the patient is able to stay at home for only a few months, we feel that the program is worth while. If the period of hospitalization is too long, the family may lose interest in the patient even though he has regained his functional independence or requires only minimal assistance; even though he easily be taken care of by his family, he may become a permanent resident of the institution. If employment is not feasible and if the family is not willing or able to provide for him, patients who have been rehabilitated to independence are transferred to a ward for the chronically ill, where much less nursing service is required.

Activities for total rehabilitation at Wayne County General Hospital were accelerated in July, 1955, by the appointment of a physiatrist in charge of the Department of Physical Medicine and Rehabilitation. A rehabilitation team has been organized and weekly conference initiated, with presentation of patients. Evaluations are obtained from the departments of surgery, medicine, psychology and social service; the patients are presented and their problems discussed at the conference and realistic program of rehabilitation is outlined.

Since inaugurating the program, a number of patients with various disabilities have been successfully rehabilitated, some only physically and others completely. The largest single group consisted of amputees. In twenty-nine patients the amputation was below the knee, five bilaterally below the knee, and ten above the knee. Two amputations were the upper extremities, one above the elbow amputation, and the other below the elbow.

Three paraplegics were successfully rehabilitated after gaining functional independence in activities of daily living with the aid of braces, crutches and wheelchair. They were discharged home and now two are awaiting to return to work in a factory, and one to enter shelter workshop for vocational training. Another paraplegic, who also walks with braces and crutches for short distances and has a good home situation, was sent to business college. He is provided with hand controls for his car and drives fifty miles to attend classes every day.

Recently a quadriplegic, with a spinal cord injury at C-6 level, was discharged to her home to assume some of the responsibilities of housewife and mother. She was trained to perform some



Rehabilitation patient treated at Wayne County General Hospital.

activities of daily living and to control bladder and bowel function, and was furnished with a wheelchair and hydraulic lift. She had no active motion in either hand. Her brachioradialis was utilized for closing and opening of the hand by extension of the wrist after insertion of a bone block between the first and second metatarsal bones, fusion of the interphalangeal joints in slight flexion, and tenodesis of the flexor digitorum longus and attachment to the radius. She was provided with a splint for the left hand, and after being trained was able to feed herself, brush her teeth, comb her hair and even write.

Several hemiplegics that were discharged from the hospital were provided with short or long double upright braces for the involved lower extremity and a special sling for the involved upper extremity.

We have found that it is important to start patients on a program of rehabilitation as early as possible. Patients usually go through a period of psychologic readjustment to their disability. If realistic programs of physical rehabilitation are instituted soon after the acute phase, the adjustment period is usually shorter and more successful. The patient undergoing rehabilitation, if properly motivated from the beginning, thinks of how to live with his disability and how to make the most of what is left of his functional abilities. If a patient, after the acute phase of injury, is placed on a ward

or the chronically ill and rehabilitation postponed, he may gradually become dependent on institutional life, losing all incentive. Leading a dependent life, the patient's disability may gradually increase in severity. For example, contractures of soft tissues, weakening of muscles or decubital ulcerations may develop. These complications retard the process of rehabilitation. Many paraplegic and hemiplegic patients and amputees have been hospitalized for many years at Wayne County General Hospital and have adjusted themselves to institutional life. They have contact with the outside world by radio and television. A forty-year-old paraplegic with injury of the cord at the level of the 10th dorsal vertebra has been hospitalized for twenty-eight years, twenty-one years in this institution. He is almost constantly in bed and only on special occasions has he been able to sit in a wheelchair. He has developed subluxation and complete fusion of both knees. After several fractures, one of the lower extremities was amputated. Through the years he has had numerous decubiti. He is above average intelligence, but when approached with a definite plan for rehabilitation, he flatly refused, stating that he was too old and would not be able to accomplish anything. His situation results from doing too little, too late. There are other hemiplegic patients and amputees who have been hospitalized for shorter periods, who have the same attitude towards possible rehabilitation. They are all afflicted with the same type of "hospitalitis." Many attempts have been made to work with these patients to make them more independent and although they have agreed to start the rehabilitation program, they have put little effort into it. Many times when improvement in function was noted, the patient would immediately refuse to continue the program and would start to have various complaints. Investigation of these complaints usually resulted in negative reports.

We may cite one case to illustrate how the Department of Physical Medicine and Rehabilitation can screen patients who are sent to the institution for custodial care to determine which ones may be successfully rehabilitated or at least made functionally independent.

A thirty-three-year-old woman was sent to Wayne County General Hospital from another institution after being hospitalized there for six months for custodial care. Her diagnosis on admission was transverse myelitis

of unknown etiology with involvement of all extremities. She had a sacral decubitus about 5 cm. in diameter and had no control of bowel or bladder function. The patient was on a Stryker frame. A careful examination revealed all muscle groups in the extremities were at a fair minus to fair level. A program was instituted to re-educate her and strengthen her muscles. Training of bowel and bladder control was begun. Gradual ambulation was started after endurance in sitting and standing was improved. The patient was very difficult to manage and uncooperative at the beginning of the program and would not even feed herself, stating that she had no hope for recovery. However, when she was removed from the Stryker frame, she was persuaded to feed herself in the sitting position. She was informed of the possibility of her becoming independent and of returning to her family. The patient then became more cooperative and put more effort into the prescribed exercises and activities of daily living. After three and one-half months on a program of rehabilitation, the patient regained bowel and bladder control and was able to ambulate with crutches. She gained fifteen pounds in weight. The sacral decubitus gradually healed without the necessity for surgical intervention. On a return visit, one month after discharge, she stated with tears in her eyes that she was the happiest person in the world, because she was now able to take care of her children and be back with her family.

Rehabilitation can be successful even in the most severely disabled patient, if the program is planned realistically with practical goals.

A patient, a forty-three-year-old white man, who had been afflicted with multiple sclerosis since the age of eighteen, was referred to the department from the Infirmary Division. With progression of the disease and confinement to bed over the years, he had developed severe spasticity and gradual paralysis of both lower extremities, severe flexion contracture deformities and a dislocation of the left hip. Both his legs were flexed in a fixed position on his chest with knees almost touching his chin. He had lost bowel and bladder control, necessitating the use of a perineal catheter. A large sacral decubitus had developed. Disarticulation of both lower extremities at the hips was carried out. Following surgery, the patient started to use a wheelchair, participate in social life, move around and visit with older patients. To the casual visitor he was the happiest man in the world, always smiling and joking. To increase his activities it was decided to change the perineal catheter to the suprapubic area. The sacral decubitus is healing gradually and after debridement it appears that no other surgical procedure will be necessary. The patient is being trained in wheelchair activities and to participate in activities of daily living with the goal of attaining full functional independence. Plans are being made for this patient to return to his parents' home. He will be provided with a special wheelchair, a bedside commode, and an overhead bar. He will re-

quire very little assistance, whereas previously it was impossible for his parents to care for him at home. Since he had some experience in drafting, the Office of Vocational Rehabilitation is planning to assist him in obtaining a homebound job.

The chief function of a Department of Physical Medicine and Rehabilitation in a county institution is to attempt to obtain total rehabilitation of the physically disabled through integration of different services. It is necessary to a "team" approach among the personnel working with the patient.

Patients who successfully complete programs of physical rehabilitation are either sent back to their previous jobs or placed on job training in order to become productive members of society. Elderly patients who cannot be re-employed, even though they have gained physical independence, can be

sent home or to nursing homes to lessen the burden of nursing care in the hospital.

Successful programs of rehabilitation will release beds for new patients which is vital to the institution and means savings of thousands of dollars to the community. The human aspects of rehabilitation, such as restoration of dignity, self esteem and happiness, cannot be assessed in dollars.

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BEHAVIOR PROBLEMS

(Continued from Page 1270)

turn because of faulty administration of their medicine by relatives and friends—none had gone to their family doctor as we had recommended.

It is within the power of each of you to further the work that we, in your state hospital system, have undertaken. We have broken the treatment

barrier so that you can now successfully control, ameliorate or reverse most of your abnormal behavior problems.

Therefore, I ask you individually, and as a Society, to consider the problems of prevention and follow-up, and the part you can play in making this a better world in which to live.

PSYCHIATRIC ASPECTS OF GYNECOLOGIC CARE

(Continued from Page 1279)

pseudopsychiatrists. Many of our cases do need experienced and trained psychiatric care; these we should be quick to recognize. Many more, however, are desperately looking for the kind of sympathy and understanding, the psychologic support given by the old-fashioned family physician,

and this is the help we are in a favorable position to offer. Recognition of this by those in our specialty may, in the long run, become the greatest contribution any group of clinicians can give to the mental and physical health of the women of our country.

The Importance of Differentiating Petit Mal from Other Forms of Minor Seizures

By E. Rodin, M.D.
Ann Arbor, Michigan

THE introduction of electroencephalography as an aid to neurologic diagnosis has helped considerably to differentiate various forms of minor seizures. Prior to the use of electroencephalography, the term petit mal was employed to cover a wide variety of epileptic seizure phenomena which last only a short period of time, usually up to three to four minutes. The increase in knowledge about seizure patterns and their presumed

The petit mal seizure is characterized clinically by abrupt loss or diminution of awareness, which interrupts the patient's stream of thought or motor activity for a period of ten to forty seconds. The patient may merely have a vacant staring expression of his eyes or there might be in addition some slight blinking of the eyelids, at the rate of three blinks per second. In other instances there may also be some visible nodding of the head or mild

TABLE I. DIFFERENTIATION BETWEEN PETIT MAL AND PSYCHOMOTOR OR TEMPORAL LOBE SEIZURES.

DIAGNOSTIC CASES	PETIT MAL SEIZURES	"PSYCHOMOTOR"—"TEMPORAL LOBE" SEIZURES
Aura	None	Frequent, consists of a great variety of somatic, visceral or sensory phenomena
Consciousness	Lost or severely impaired	Lost or severely impaired, but at times retained. "Mental Diplopia"
Motor Activity	None or some jerking of eyelids at the rate of three jerks per second. At times also rhythmic jerks of the head or arms	Chewing, smacking or swallowing motions, performance of complex automatic acts. At times no motor activity visible
Duration	10-40 seconds	1-2 minutes
Postictal	Patient is fully oriented may be amnesic for seizure	Is confused, drowsy, possibly aphasic, may be amnesic for seizure
During seizure	3c/s spike-wave in all head areas	Seizure pattern complex, either high voltage 6c/s activity most pronounced in the temporal areas, or focal slow wave activity in temporal areas, generalized slow wave activity. And other types of seizure patterns
EEG		Usually focal abnormality in one or both temporal areas
During interval	Frequently minor	
Etiology	Hereditary, idiopathic	Usually acquired, although hereditary factors may be present in addition
Age of onset	Around three years	All ages, but more frequent in adolescence and adulthood
Interictal emotional disturbances	Frequently normal	Frequently marked
Most effective drugs	Tridione, Paraldone, Milontin, Amphetamines, Diamox	Dilantin, Mesantoin, Phenurone, Mysoline, Phenobarbital

origin has allowed the separation of various groups of minor seizures. The two largest groups are true petit mal and minor seizures of the "psychomotor" or "temporal lobe" variety. The patients who belong to either group are usually sufficiently different in their clinical manifestations, electroencephalographic findings, etiology of seizures, prognosis, and response to therapy, so that the clinician should try to make an accurate distinction between them. The main differences are summarized in the accompanying table. Since neither of the terms "psychomotor" seizures or "temporal lobe" seizures is completely satisfactory, both terms are used at present more or less synonymously.

to moderate bilateral jerkings of the arms and, occasionally, the legs. This is usually also at the rate of three jerks per second. The seizure ends abruptly and the patient immediately afterwards continues what he had been doing prior to his attack, without mental confusion.

The electroencephalogram reveals during the seizure the classic 3c/s spike-wave pattern described by Gibbs and Lennox in 1937. This usually starts suddenly in a bilaterally symmetrical and synchronous manner involving all head areas, and terminates abruptly when the patient becomes responsive again. The more pronounced the spike component of the discharge (especially if multiple spikes are present which are followed by a wave), the greater the likelihood that the previously men-

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tioned clinical myoclonic components of the seizure are pronounced or that the patient suffers in addition from grand mal convulsions. The patients with petit mal, as defined here, are usually children or young adults and are as a rule extremely sensitive to such activating procedures as a period of hyperventilation, small doses of Metrazol, or intermittent photic stimulation. The sensitivity to hyperventilation is usually to such a degree that this may be conveniently demonstrated in the clinician's office and a positive diagnosis can be established, even without electroencephalography, on basis of the typical clinical picture alone. No other seizure type is as easily reproduced by a two to three minute period of deep breathing as is petit mal.

While petit mal seizures are thus reasonably simple in their pattern, the "psychomotor" or "temporal lobe" variety of minor seizures is frequently rather complex. The attack may start with immediate loss of consciousness or, more frequently, with an aura. The aura—which is, of course, actually the onset of the seizure—may consist of a variety of visceral sensations, the most common being a knot or lump in the stomach which rises to the throat. Following this there is frequently dizziness, which may be a sensation of lightheadedness or of impending blackout or may be a true subjective or objective vertigo. After this, loss of consciousness frequently ensues. In other instances, the patient may experience a sudden fear sensation before blacking out or may be aware of alterations in space perceptions, of a dreamy sensation, or have an olfactory, visual or auditory hallucination. The patient may remember these clearly after the attack or may only be aware of having had a hallucinatory experience the content of which he is unable to recall. During the attack the patient usually retains his posture; he may continue his activities in an automatic fashion or may "freeze" to a chair, table, or kitchen stove. There are, frequently, lip smacking, chewing motions of the jaw, and swallowing motions. These may be very pronounced or only faintly visible. Other motor activities, if the patient does not remain "frozen," may include repetitive and rather purposeless movements of the upper or lower extremities, such as plucking at clothes, waving an arm, stamping a leg, or the like. The variety of these acts is practically infinite in the various patients, although the seizures are usually alike in any given patient. This phase of the seizure lasts,

usually, one to two minutes during which time the patient is totally unresponsive.

Following this, the patient becomes gradually more responsive and during the recuperation is likely to show signs of mental confusion, drowsiness or nervousness. The patient may be physically or verbally abusive, may complain of a headache and, if the seizure arose in the dominant hemisphere, frequently exhibits a noticeable aphasia. This consists initially of a complete inability to talk and an inability to name objects; if the patient can say anything at all it is fill-words like, "ah, ah," "yes," "you know," "shucks," and the like. Later, as cerebral recovery progresses, the patient becomes more fluent but may still be confused as to time and place. This postictal state lasts up to five to ten minutes. Although one is able to communicate with the patient during this time and may even receive seemingly rational answers, especially if there is no aphasic component, the patient may later have complete amnesia for the entire sequence of events and ten minutes later may even vigorously deny having had a seizure at all. In other instances, there may be amnesia only for some aspects of the seizure and, especially during a "dreamy state" or hallucinatory experience, the patient may be aware of his surroundings as well as of the content of the hallucination. This is the state which Hughlings Jackson termed "mental diplopia."

The electroencephalogram during one of these attacks shows a variety of seizure patterns. There may be a high voltage 6c/s rhythm present, most pronounced in the temporal areas, or diffuse slow wave activity or focal spike and sharp wave activity may appear in one temporal area. At times the electroencephalogram may be so distorted by movements of the patients that the seizure patterns can not be seen clearly at the time of the attack; but during the postictal confusion state there is frequently a pronounced slow wave focus in the temporal area on the side where the seizure arose. This slow wave focus may persist up to several hours, depending on the severity of the seizure. In contrast to patients with petit mal, who frequently have normal interictal records, the electroencephalogram in the majority of the "psychomotor" or "temporal lobe" seizure patients shows abnormalities, usually located in one or both temporal areas, even in the resting state. Hyperventilation is not as effective in producing a seizure as in petit mal, and if a seizure is precipitated it

usually does not occur during the hyperventilation effort but rather about thirty to sixty seconds after cessation of the overbreathing. While petit mal occurs usually in children and adolescents, psychomotor seizures occur most commonly in adolescents and adults, although no age is immune.

If the above criteria are kept in mind, a differential diagnosis can usually be established on clinical grounds alone. It may, however, be difficult to differentiate some minor seizures of the "temporal lobe" variety from hysterical attacks. This difficulty is increased markedly if the seizure shows only minimal or atypical motor components and especially if it does not pass through the entire sequence of events described above but ends, for instance, after the aura. In such cases, it is highly important to observe an attack in the laboratory while the electroencephalogram is recorded. Seizure patterns in the electroencephalogram during the attack are diagnostic of the convulsive nature of the disturbance.

The differentiation of petit mal from other forms of minor seizures is not only of academic interest, but is also of immediate concern for the management of the patient. Petit mal, with or without grand mal convulsions, is nearly always on a genetic hereditary basis and almost never on the result of birth injury, encephalitis, brain tumor, or trauma. The hereditary factors may not be obvious if one directs attention only to the presence or absence of grand mal seizures in the siblings and parents but they become soon apparent if habitual fainting spells, febrile convulsions, "worm fits," seizures after alcohol ingestion, etcetera, are also taken into account. Lumbar puncture and pneumoencephalography can be dispensed with in the classic case.

The prognosis in regard to the disappearance of petit mal seizures in adolescence and early adulthood is fair, although the petit mal attacks may be superseded by grand mal convulsions and, later in life, "temporal lobe" seizures may also develop. As long as there is only pure petit mal present, the intellectual and emotional development of the child is likely to be reasonably normal. Behavior-wise, the patients do not present, as a rule, any marked difficulties unless their seizures come so frequently that one can speak of a petit mal status. The patients may then present, clinically, either a psychotic or a hysterical picture. The drug treatments of choice are: Tridione, Paradione (prefer-

ably each of these two drugs should be combined with Dilantin in order to forestall the development of grand mal convulsions), Milontin, Amphetamines, Diomax or Prenderol. A ketogenic diet is occasionally also of benefit. There are no operative procedures available which are of any help.

The other forms of minor seizures have different implications. Any minor seizure which is not petit mal is likely to have demonstrable organic pathology as its basis. Although hereditary factors frequently play a role, there is an equally large factor of acquired pathology. This may be on the basis of birth injury, other head trauma, early encephalitis, a porencephalic cyst, or other congenital malformation in children; of brain tumor, cerebral degenerative, or vascular disease in adult patients. Contrast radiographic studies, like pneumoencephalography or angiography, have to be carried out in many instances for final diagnosis. In children and adolescents the intellectual development may be normal, but more or less severe emotional disturbances are usually present. Hyperactivity, excessive mood swing, unmanageable and unruly behavior, inability to concentrate, temper tantrums, and excessive masturbation are frequently outstanding features. If the seizures also involve the middle and posterior portion of the temporal lobe, with resulting auditory and visual hallucinations, the patient may present a clinical picture suggestive of either severe hysteria or psychosis.

The above mentioned emotional difficulties are also commonly seen in adult patients with frequent minor seizures of this type and suicide attempts occur often in this group of patients. The prognosis of spontaneous improvement of the seizures during adolescence and adulthood is rather poor, and most patients are able to make only a marginal social adjustment, despite some happy exceptions. "Epileptic deterioration" is most frequently observed in patients with this type of seizure pattern.

The seizures are often very difficult to control pharmaceutically. The drugs which are relatively effective are: Dilantin, Mesantoin, Mysoline, Phenobarbital, Phenurone, or mixed preparations like Mebaroine, or Phelantin. A ketogenic diet is of no apparent value. If there is a definite unilateral focus, limited to the anterior portion of one temporal lobe, surgical resection of this part of the temporal lobe may lead to good results after medical management has failed. The surgical

approach, however, should be limited to patients with no evidence of separate involvement of the other temporal lobe and where a conservative regime, of adequate medication and a sympathetic psychotherapeutic approach directed toward lessening of tension, has failed.

Summary

1. The difference between true petit mal and other forms of minor seizures is emphasized. True petit mal occurs usually in childhood and consists of "absences" without warning. These last usually between ten and forty seconds and are not followed by mental confusion. During the seizure some rhythmic blinking of the eyelids, nodding of the head, or slight jerking of the arms or legs may be noted. The EEG shows usually a classical 3c/s spike-wave pattern and is frequently normal in between seizures.

2. The most common form of other minor seizures is the "psychomotor" or "temporal lobe" variety. These seizures frequently have a warning. They last about one to two minutes and are followed by a two to five minute period of mental confusion. During the seizure, itself, complex muscular movements may be carried out and a variety of sensations may be experienced, with complete or incomplete amnesia afterwards. The EEG shows complex patterns during the seizure and in the interval a focal abnormality, involving one or both temporal areas, is frequently present.

3. Petit mal is one of the classic forms of "idiopathic" or "genetic" epilepsy. Lumbar punc-

ture and pneumoencephalography can be dispensed with if petit mal is present alone or accompanied by grand mal seizures which are not preceded by an aura.

4. Other minor seizures are usually of the acquired type; hereditary factors, if present, are somewhat less important than in petit mal. Diagnostic procedures, like pneumoencephalography and/or angiography must often be carried out to exclude a mass lesion.

5. Petit mal patients do not present, as a rule, overt behavior problems; patients with other forms of minor seizures frequently do.

6. The more useful drugs in petit mal are Tridione, Paradione, Milontin, Amphetamines, Diamox and Prenderol; other forms of minor seizures respond better to Dilantin, Mesantoin, Mysoline, Phenobarbital or Phenurone. If all medical management has failed and if the focus of pathologic activity is limited to the anterior portion of one temporal lobe, surgical ablation of this area may be of benefit.

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MEDICAL AND PSYCHIATRIC COLLABORATION

(Continued from Page 1283)

facilitated by physicians. It has lagged far behind other branches of medicine.

Psychiatrists and physicians can collaborate in treatment. Beyond this they can help to change the public attitude toward mental and emotional illness which to a great extent is understandable, curable, and preventable. Physicians can help remove the stigma that is a primitive, prerational, cultural inheritance. One only has to think of

Adams, Jefferson, Lincoln, Newton and Darwin to realize that severe emotional disturbances do not occur alone in weaklings.

Finally, a benevolent tolerance, criticism and helpfulness in the realization of the great handicap under which psychiatrists, especially in public hospitals, labor will help relieve or lighten a staggering burden which our society is often needlessly carrying.

Medicine and Labor in These Changing Times

By Walter P. Reuther
Detroit, Michigan

YOUR INVITATION to contribute this year's installment to the distinguished series of Biddle lectures before the Michigan State Medical Society comes as a signal honor to me as an individual and to the Union I represent, the United Automobile Workers. As an individual, I shall always be profoundly grateful for the fact that in 1948, after being almost mortally wounded by a shotgun blast through the window of my home, I was put back together again. I know it was only through the skill and dedication to service of the physicians who gave my case immediate attention, in many cases at great inconvenience to themselves, that I am not only still alive today, but can function as a physically whole person. For the rest of my life, I shall carry with me great respect, affection and appreciation for the many doctors whom I came to know as a patient during those critical days.

I share with many Americans a deep sense of how much better life has become as a result of the striking advances in medicine. Millions of people are today living with diseases that would have meant certain death only a few decades ago. The major infectious diseases have been virtually conquered. Rehabilitation of amputees and paraplegics borders on the miraculous and offers new hope for millions of victims of the major chronic diseases. Almost certainly there lies ahead a break through in our understanding of how cancer destroys the processes of life, the discovery of new methods for the detection and treatment of cancer and heart disease, and the application of new tools and understanding to the conquest of mental disease. These must be challenging and rewarding times to be a physician.

These advances have made modern medicine inherently more expensive. The worker has had to find ways to allocate more money to health

care, to pay and arrange for it in advance and to share its cost. Health insurance has become nothing less than essential and its further development inescapable. And in the process, labor and medicine have become more dependent on each other than ever before.

I think it can be said fairly that while medical societies may have entered prepayment reluctantly in order to avert government medicine, labor entered voluntary health insurance reluctantly because a government program was not available. The original motivations of both medicine and labor are now of only academic interest. What is far more important is that both are actively involved in prepayment and our common problem is to make it work.

To accomplish this we face some troublesome and unsettled questions—the scope of health insurance; setting of fees and methods of remuneration that are adequate, on the one hand, and equitable on the other; finding ways for health insurance to contribute to the best development of good medical care. Whenever two groups are thrown together as are medicine and labor some friction will be generated. I am not too worried about the friction generated by these problems. I hope that this meeting will lead to a better understanding between organized medicine and organized labor. Such understanding is absolutely essential for the fullest development of medicine and for the sound financing of health care.

I would like to tell you a little about unions, because I fear that normal sources of information in the community often do not give an accurate or balanced picture of the trade union movement.

Through most of history the balance has been heavily weighted against the working man as an individual. Workers came to organize unions in order to get a better share of the good things of life. Only through association could he aspire to make real economic progress not only on the wage front but in terms of the broader gains of economic security, justice and dignity.

Unions are now looking at the length of the

Biddle Lecture presented at the ninety-second annual session of the Michigan State Medical Society, Grand Rapids, Michigan, September 25, 1957.

Inasmuch as Mr. Reuther, because of illness, could not be present at the session for which the lecture was scheduled, his address was read by Leonard Woodcock, vice president of United Automobile Workers.

work week and again, as when labor campaigned to reduce the twelve hour day, we find that leisure is supposed to be O.K. for others but that it leads merely to licentiousness in workers. Evidently, this is one argument that hasn't changed much with the times. As wage payments are not enough to assure economic security when the worker is too old or unable to work, labor turned to various forms of social insurance—pensions, when the worker became too old to work and too young to die; unemployment insurance, guaranteed annual wage plans, compensation for work injuries and other such programs. It was necessary to protect the worker against hazards to his health and safety on the job and this was why some of the early labor health centers were established.

I think that our Union in particular draws its effectiveness and inherent strength not only from struggling for a better life for its members but from its moral concern that labor's gains must be accomplished together with, and not at the expense of, the community. Our members today have cost-of-living elements in their pay. We, nevertheless, are concerned with the rising cost of living. It was no publicity stunt when last month I called upon the presidents of the major automobile companies to join with us in the first steps to reverse the tide of inflation.

It is possible to make economic gains without democracy and in some parts of the world advancement has been achieved at the expense of freedom. One of the great challenges of today is to prove the compatibility of economic security and political liberty. I believe our union to be the most democratic in the world. Our members are free to criticize and they do criticize; our members can remove their leadership, and they do it at times; our members can reject proposals advanced by their leadership and they do so; and recently we have created an independent body entirely outside of the union structure to which members can have recourse with their complaints about the union.

We have, it is true, pioneered in many new social programs through collective bargaining; pensions, supplemental unemployment benefits, higher levels of disability protection and so forth. Almost every one of these programs was originally characterized as "destructive of the American way of life." All are now regarded as worthwhile to the worker, good for the company, helpful to

the economy and good for the country as a whole. The fact that society now acknowledges the value of past gains has not inhibited many people from criticizing each new proposal in the same old way. Practical bargaining gains like these that have been hammered out over the bargaining table reflect the best joint thinking of management and labor and have made a great contribution to the prosperity of America. Be assured that this progress is not at an end.

Our position also derives its strength because demands advanced in collective bargaining arise out of workers' basic needs. Ultimately the contribution of labor leadership depends on its ability to know what workers want and need as accurately as possible. When the UAW takes a position on a large issue it does so only after it has made a careful study of the problem and after the issues have been thoroughly considered and debated by a convention of over 3,000 delegates, freely elected by secret ballot from among the rank and file of the Union. Our collective bargaining negotiations with the major automobile companies are preceded by a whole series of meetings at which elected delegates from plants all over the country have had an opportunity to discuss and act on these demands.

However much the newspapers, may criticize each new demand that the Union makes, the fact is that once the membership, through democratic processes, decides that demands arise out of real needs and they are economically sound, they will back them up—even at great sacrifice. In 1950, when the Chrysler Corporation refused to provide funded pensions, the Chrysler workers stayed out on strike for 104 days to nail home this issue of funding. And when Henry Ford II insisted that the workers would prefer a stock participation plan instead of the guaranteed annual wage that they were demanding, the Union quickly offered to put the question to a test by secret ballot. At this point, Ford management promptly withdrew its proposal and began to bargain in earnest.

I am little concerned about the lack of understanding on the part of some in medicine toward labor and a tendency to disparage the legitimate objective of the trade union movement. The president of a local medical society recently attacked our proposal for a shorter work week. He said this was leading in the direction of a "no work week" and characterized the objective of union-

sm as "security, idleness and play." As for security, millions of Americans, including doctors, want and need economic security. Security isn't their only goal but it is an important one. It doesn't rank first and neither do idleness and play rank second and third for any group of thinking Americans, including unionists. American labor is not only concerned with a fair share of economic gains for the working man but, with all Americans, we are concerned with the great problems of peace, abundance and democracy. If the medical profession accepts only a caricature of these aspirations it will only harm itself in failing to understand the issues that motivate the majority of the people. If it tries to understand these motivations it will realize that the quest for security is not at odds with medical practice any more than is the quest for health. People need good programs of economic and health security. Such programs can be worked out in a manner that will enhance medical practice rather than harm it and to the satisfaction of the medical profession as well as to the public at large.

When workers have complaints about their medical insurance they are more likely to come to the Union that has negotiated the insurance plan than to the Medical Society. Our members bring us many complaints about medical insurance. The worker wants to know why, after paying his premiums, he has to lay out substantial amounts to the doctor when he has an operation. He wants to know why he can get x-ray tests only when hospitalized. He wants to know why so many medical services are not covered by insurance. He wants to know why the insurance so often fails him in serious illness.

The Union screens out unjustified and excessive demands for service. It plays a very important role in telling the worker, in relation not only to his insurance but to his labor-management contract rights—when his demands and grievances have no merit or cannot practically be realized or corrected. But I cannot conscientiously quarrel with union members when they want prepayment to cover a bigger segment of health care for a longer period of time, and not be limited to bills for the hospital and the surgeon, or when they demand real value for their insurance money. These are not ideological problems; they are practical. They can be answered. The question in America, as far as millions of wage earners are

concerned, is not whether they are going to have adequate prepayment programs. The question is, "How?"

The president of the American Medical Association recently deplored labor demands for full payment of all items in medical care. He accused labor, by setting this improperly high standard, of disparaging the performance of existing plans. This charge doesn't even come close to the real issue. We are not, as Dr. Allman seems to think, arguing about extending insurance from covering most of the cost of health to covering all of it. Present insurance plans, at best, cover only one-third of the average family's health service bill, and we are trying to get benefits extended to cover about another third of health needs. The present deficiencies, rather than excessive demands by labor, constitute the main problem in health insurance today.

Workers not only want more and better prepaid health coverage but they are willing to pay for it. They know that truly comprehensive care costs more. Although they are concerned with rising costs and with some abuses and inefficiencies in existing programs, they are not trying to reduce doctors' incomes, as has at times been charged.

The fact that employers pay premiums in full or in part has led to the false assumption that workers will make unreasonable demands for health coverage because, somehow, they are not paying for it. They are, because employer contributions are monies the worker could otherwise get in cash or other benefits. This is perfectly clear at the bargaining table, where a certain amount of money is applied to the hourly wage rate, a certain amount to health security, a certain amount to pensions, and so forth. The money that employers contribute to these programs is just wages, in a form to best serve a social purpose. Doctors have made great gains out of the fact that the workers have earmarked a portion of their wages as social wages. This has permitted a greater economic allocation to the cost of hospital and medical care, if only by the fact that in this collective way workers as a whole have been able to pay for medical care that they could not have paid for on an individual basis. The trouble is that this has led some doctors to assume that the insurance has increased the worker's ability to pay, and they charge more for their services. As a result, we have found that the dollar paid by the employer and the worker

under the health plan is not worth as much as the dollar paid out of pocket at the time the service is performed. Those who are responsible for the development of prepayment must assure the beneficiary that he will receive full value for his prepayment monies, if we are to increase the allocation of our national income to personal health services.

To the extent that medical societies entered prepayment to avert legislation, they were relatively less concerned with finding the best possible way for prepaying medical care. Rather than to hammer out a whole new set of insurance principles that could be properly applied to medical care, they adapted the ready made doctrines of casualty insurance. Inappropriate as they are, they have been sanctified as "first principles" which now conceal the lack of medical orientation of too many of our health insurance programs. I really don't believe that the average doctor, with his deep interest in medical services, is ready to adopt the insurance industry's concepts of losses rather than benefits, indemnity rather than service, financial devices to inhibit use, to eliminate the small claim and to exclude predictable expenses rather than preventive care, early diagnosis and easy access to health services.

I fear that medicine is in danger of compounding these errors when it flirts with major medical programs like that at General Electric. Whatever its current vogue, major medical epitomizes the complete capitulation of medicine to insurance.

A great gap exists today between the advanced state of medical science and the kind of medical care received by the bulk of working people. This gap does not exist in the field of medicine alone. For the first time in the history of civilization we have the tools with which to conquer poverty and hunger and disease and ignorance and man's other ancient enemies. For the first time mankind has the know-how and the scientific and technical tools to master his physical environment. This is the first time that it is no longer necessary for people to be hungry, for people to be naked or for people to be denied the essentials of life. Our great task and the great challenge before the free people of the world is to find a way to harness the power of science and technology, not to make H-bombs, not to destroy human life, but to advance the well-being of the human family.

You can go out into the Ford plant where they

can make an engine block in 14.6 minutes. There are no manual operations involved. This plant is already obsolescent. Television sets are manufactured by automation, without a human hand touching the product. On the drawing-boards they have new machinery that will make the equipment they use today look like museum pieces. I was told the other day that there is a machine that can capture the tone qualities from a recording by Enrico Caruso. That machine can sing, with Caruso's voice, a song written twenty years after his death.

This is the world in which we live. Machinery is taking tremendous steps forward in terms of creating greater and greater abundance, with less and less manpower.

Now what are we going to do with this technological revolution? If we gear it to the needs of the people, if we use this power with a sense of social responsibility, we can build a greater new world with all its poverty and hunger and unnecessary suffering from disease removed. Unless we use this power sensibly and sanely in the interests of all of the people, then these machines instead of building a better world, can dig our economic graves.

This is the problem in America today. The search for new answers must have its application in medicine as well as in all the other fields of man's struggle. While men may differ as to how best to close the gap between our potential and its realization—between the kind of medical care that is within the competence of the medical profession to provide and what is now generally available—we cannot and must not stand still. I progress is to be made, bold experimentation is needed. Old concepts must be re-evaluated and adapted, and new ones must be developed. Man fear change; but change is inevitable.

A wise society, however, tries to guide change in relation to certain principles. In medicine these principles recognize that while practice is firmly based on science, it is still an art. Scientific progress has increased the patient's bewilderment at what is happening to him when he seeks medical care. Far from eliminating the need for a close personal relationship between the patient and his doctor, it has made the doctor-patient relationship all the more important. Where a continuous doctor-patient relationship does not exist, as now too often the case with many Americans, should be established. Where it exists it should

be preserved and enhanced. Let me dispel a bogeyman. Anyone who has thought about medical practice knows that it is essential to preserve the personal relationship in medicine. No one would knowingly advocate impersonal, assembly-line medicine. But let us not stretch the valid need for doctor-patient rapport to apply to the way in which a pathologist gets paid for his services. It is very difficult for me to see how the doctor-patient relationship is in any way impaired by the adoption of a modern plan for transferring money from the patient's pocket to that of the doctor.

An improved standard of medical practice is lengthening the already long and arduous period of education through which the modern physician has to go—college, medical school, internship, residency—which can take him into his thirties before he begins to earn a reasonable living. The doctor can never stop studying if he is to keep pace with evolving medical knowledge. We must find ways to increase his opportunities for continuing education and research. Most important, I recognize the weight of life and death responsibility that bears constantly on the physician. Certainly these considerations must be fully reflected in the financial rewards for the practice of medicine.

In all planning for medical care, quality must receive the highest possible priority. Our Union wants no compromise with quality; we are not looking for bargain basement medicine. In this I am sure our aims conform with yours. The arrangements to provide and pay for care must not conflict with the objective of high quality care; rather they must reinforce it. But we cannot accept the contention that quality is automatically lowered by any change at all in the currently prevailing pattern for practicing medicine or paying for it.

In present practice quality may be sacrificed by the heavy concentration on episodic illness to the neglect of preventive care. One of the greatest challenges in medicine is the opportunity to detect cancer and other fatal diseases at a stage when these killers can be easily disarmed. How many doctors are attuned to preventive medicine? How widespread is the application of these new techniques for early disease detection? How high is the unnecessary fatality count today?

It is because I believe we are in essential agreement on broad principles that I am confident we

can find solutions to the problems concerning us.

Recent progress in prevailing community health insurance has been too slow. As a matter of fact, there is considerable regression from earlier principles of prepayment. Because of this, pressure has been building up in unions to set up their own medical care programs. Some unions have done so. The Mine Workers have made a great contribution in building and staffing ten modern hospitals and clinics.

The UAW decided not to launch a separate union medical care program. It has taken the much more difficult course of working with the rest of the community. Setting up a union program would be pulling out of existing hospital-medical programs the group that now carries the major share of the financial load. It would fragmentize medical care in the community and ultimately leave thousands and thousands of families in a kind of no-man's land with no real protection. We support the community approach because we believe that labor in a free society cannot solve its problems in a vacuum—that we can make progress only if we co-operate with men and women of good will in the whole community to find answers for the problems of all the people.

We have consistently bargained for and supported community plans such as Blue Cross and Blue Shield. In our negotiations we have not asked for special favors, but have sought to improve the community-wide contracts available to all. The prevailing pattern of our health service benefits throughout the country amply demonstrates our determination to improve and support community-wide plans.

For years we have been urging existing plans to experiment with substantially broadened benefits. As we have said on many occasions, we will support experimentation which is soundly conceived and medically oriented and which effectively removes the economic barriers to medical care. We would hope, for example, that the Michigan Medical Service Plan would provide benefits like those developed under Windsor Medical Service by the Essex County Medical Society in Ontario.

We are also convinced that further experimentation is necessary; that is why the UAW is backing the development of the Community Health Association which, under medical leadership, will be experimenting not only with broadened prepayment benefits, but also with

medical care organization. In this new program it is contemplated that benefits will be comprehensive in scope including preventive care, and rehabilitation, and that the care will be provided by physicians in group practice. We are not going to coerce people into joining this plan. Every individual in every group will have free choice of plan, so that each family may elect to be a member of this plan or some other program, like Blue Cross-Blue Shield. For over five years, this principle of free choice has been a feature of the UAW's collective bargaining contracts with the auto industry. In California, Ford, Chrysler and General Motors workers individually choose between Blue Cross and Blue Shield on the one hand and the Kaiser Foundation Health Plan on the other. The Union firmly believes that its efforts in the provision of medical care must be to expand choice, not restrict it.

Earlier this year, more than forty prominent physicians, about half of them from Michigan, came together at the invitation of the CHA to advise on how to establish and maintain a high level of medical care under its program. Even physicians who expressed serious reservations about the proposed program approached the discussions with an objective attitude and were most generous with their advice and suggestions. This certainly is in the best tradition of the medical profession, and of democracy, where free men of good will join together to find ways of meeting human needs. In other areas and in earlier times, the use of ostracism and sanctions against new plans proved not only unedifying but ineffective. This spirit on the part of Michigan Medicine holds promise of a mature and constructive approach, not only to the possible development of new medical care programs, but to the perfection and extension of existing plans.

INTERPOLATION BY LEONARD WOODCOCK: I understand that at this convention you have approved a set of proposals on medical insurance. From accounts in the newspapers, it would appear that you have made real progress and have taken a sound approach to such important matters as affirming the service principle, extending the range of service benefits, and raising the income ceilings and making them work. And I am also happy to hear you have reaffirmed the all-important community-rating principle.

Obviously, we must reserve final assessment of your new program until it is more fully developed. Naturally, too, we shall want to know what it will cost. I can, however, endorse the direction that has been taken.

If we lived in a totalitarian state the kind of problems we have been discussing would be handled by decree. This is not the way we do things in America. While the processes by which we advance in a democracy are infinitely more arduous, our experience has shown that sound and practical solutions to all our problems can be found.

I personally believe that America is, in truth, the last best hope of freedom in this very troubled world of ours. We are blessed, as no other people in the world, with great natural resources, with an extremely efficient economy, with a highly productive agriculture—we are really blessed as no other people in the world are blessed.

But I think we need always to keep in mind—doctor and labor leader, banker, farmer, business man and factory worker—we need always to realize that fundamentally the struggle in the world between the forces of freedom and the forces of tyranny is not a struggle for geography but is essentially a struggle for the hearts and the minds and the loyalties of the people of the world.

And freedom will win that struggle, not by the size and destructive capacity of its H-bomb. We need, because of the necessities and the realities of the world situation, to be strong militarily to meet the threat of Communist aggression, but we must always understand that military power is but the negative aspect of the total struggle against the forces of Communist tyranny. In the long pull, freedom will win only if it can attract to its side hundreds of millions of uncommitted people, and they are going to judge freedom in a large measure by what we in America do with the opportunities that freedom gives us. They are going to judge us, not by our industrial indexes, although they are very impressive; or by the fact that the American economy yielded in excess of four hundred billion dollars in gross national product last year, although that was impressive. They are not going to judge us by the level of our technology or by the speed of our jet planes or the number of new shiny Chevrolets that General Motors turns out on its many assembly lines, although all of these economic facts are very impressive.

They are going to judge us by the true measure of the greatness of any civilization; by the social and moral capacity of the society to translate material values into human values, to reflect technological progress in human progress and human happiness and human dignity.

The Challenge

What does this next year hold for us Doctors of Michigan? To specifically prognosticate is impossible, but certain funds, statements and happenings in the past few months allow us to make reasonable assumptions. Recent piecemeal infringement of our basic philosophy of the practice of medicine by third parties alarms me and I feel that as a united profession we must make our stand and fight *for* what we think is right—*right for the people we serve*.

You will note that I said “fight *for*” and not “fight against,” as so often Doctors are berated. We know this criticism is mistaken but we must let all people know we are fighting *for* their free choice of a physician. This must be our basic belief, as it has been down through the centuries. This doctor-patient relationship, voluntarily established by the patient who chooses a physician and by the doctor who assumes responsibility for the patient's care must be maintained. No third party must be allowed to arbitrarily set up restrictions that would alter the basic relationship. These freedoms of patients and doctors are closely allied; take away one and eventually all may be lost.

We must emphasize that we are fighting for this free choice of physician, a “status quo” if you like, for the benefit of the people; of people in all walks of life, and not for the benefit of the Doctor. Actually, the physicians lot might be easier under third party control, whether it be governmental, hospital, or pressure groups. Hours could be shorter, vacations more often, and retirement benefits more secure. However, we know, under previous existing plans of this type, that the caliber of medical care suffered; that the “art of medicine” quickly died out, and that people who could, preferred paying for their private physician in addition to the “Plan's” cost. This free choice is not nebulous or irrelevant. It is something deep and sincere in peoples’ hearts and it is something that we all must fight for.

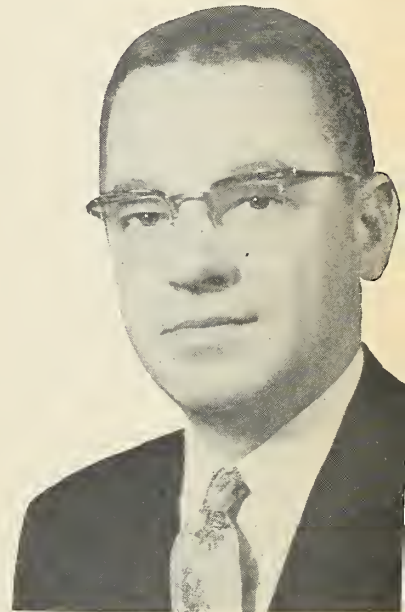
By this time the results of our Market-Opinion Survey on Pre-Paid Health Care have been given to our House of Delegates, and decisions and directions have been given to the Board of Blue Shield and to us Doctors.

With the help and backing of each of you, your Officers and Councillors will see that your mandates are consummated. The horizon may be hazy at this time, but I am confident that we can achieve what we desire.

Geo. H. Slagle.

President Michigan State Medical Society

President's



Message

Editorial

MENTAL HEALTH AND MENTAL ILLNESS

Mental illness has long had a "stigma" attached to it that presents serious obstacles to the treatment and rehabilitation of psychiatric patients. This stigma seems to suggest that the causes of mental illness are shameful, evil and unnatural. In fact, relatives of mentally ill patients often refuse to admit the illness is mental and take the patient to the internist, gynecologist or neurologist or any other doctor, rather than the psychiatrist. And, finally, when it is evident to them that the illness is mental, they rationalize that the mental condition must be caused by a head injury, brain tumor or some other physical cause. It is only recently that people are beginning to break through this stigma and view mental illness in its proper sphere.

As this proper understanding of mental illness by the public becomes more accepted, the more the general practitioner will take his proper role as the first line of defense against mental illness. This is evidenced by the American Psychiatric Association and the American Academy of General Practice, forming a joint committee this past year to stimulate interest in this project. We, in Michigan, must encourage the men in general practice to visit and give help in our mental hospitals, as well as to encourage general hospitals to create psychiatric facilities and wards, within their framework.

Your Mental Health Committee has been in favor of county medical societies creating mental health committees and has offered assistance to county medical societies in developing programs in the field of mental health.

The Committee maintains its deep interest in teen-age crime and juvenile delinquency. It judges that a carefully selected commission of twelve to fifteen members to study the issues involved is probably the best long term approach to the problem.

The Committee strongly endorses the resolution approved by the House of Delegates of the AMA and recorded in the *Journal of the American Medical Association*, Vol. 163, p. 52 (January 5, 1957). This resolution points out that certain

types of alcoholic patients should be accepted by general hospitals as medical cases and so treated. Hospital staffs are urged to cooperate in this program.

The articles appearing in this issue may stimulate interest in further communications covering specific areas or topics in the field of Mental Health. The Committee will attempt to answer any such requests emanating from the readers of this JOURNAL. We are grateful to the State Medical Society for the opportunity to participate in this issue of the JOURNAL.

IVAN A. LACORE, M.D., *Chairman*
MENTAL HEALTH COMMITTEE

PRACTICAL CITIZENSHIP

The Michigan Medical Service—Blue Shield—and its program are a direct exposition of the place of the doctor in the eyes of the public and in the work of the public and the state. At the annual meeting of the Michigan State Medical Society in Pontiac in September, 1931, the House of Delegates adopted a resolution authorizing the appointment of a committee to study the costs of medical care. Under this authorization, Carl F. Moll, M.D., of Flint, the president at that time, appointed a study committee consisting of: W. H. Marshall, M.D., Flint, chairman; F. A. Baker, M.D., Pontiac; L. G. Christian, M.D., Lansing; B. U. Esterbrook, M.D., Detroit; C. S. Gorsline, M.D., Battle Creek; and F. C. Warnshuis, M.D., secretary *ex officio*.

The committee organized and developed a study plan. Nathan Sinai, D.P.H., of the University of Michigan, was the director of this study. A survey was made of every item of medical and health expense for a group of approximately 40,000 people in various areas of the state over a period of a year's time. The study of the major committee included a trip to Europe and especially England, an analysis of all the information, publishing of a book in June, 1933, and the outlining of a "Mutual Health Service" which was published in THE JOURNAL in May, 1934*. The Mutual Health program suggested by this committee failed of adoption by the House of Delegates, but it

*See footnote on next page.

served as the basis upon which other workers in various parts of the state developed plans and programs, and ultimately Michigan Medical Service evolved. It is interesting to note that of the original committee three are still alive: L. G. Christian of Lansing, C. S. Gorsline of Battle Creek, and Fred A. Baker of Pontiac.

Throughout the years, our State Medical Society officers, many of whom have passed on, devoted time, effort, material and all sorts of resources and personal sacrifice in working out a program to relieve the high and catastrophic costs of medical care. Michigan Medical Service was the result of research and study by these devoted pioneers working in a totally new field of endeavor, apparently far removed from the practice of medicine. In the November issue of *THE JOURNAL* we will report another effort along a kindred line. During this year the State Medical Society has conducted a mammoth Market Opinion Survey involving almost half a million of our state's citizens, trying to find what they wish in the nature of pre-paid medical care—and if they want it. We have also surveyed the medical profession to determine their desires and their willingness to work. These reports will be presented in the November *JOURNAL*.

Through the years it has always been the experience that leaders, pioneers, and forward thinkers are ready to work and to devote not only their spare time but their very important business hours, days and weeks which should be devoted to their practice, to planning and organizing. Had it not been for these men, medical societies would have died years ago. During this current year and at the last meeting of the House of Delegates, decisive action has been taken more clearly to define and more distinctly to outline the provisions for care to our patients, and to protect our own vital interests in preservation of the private practice of medicine. This work has been done by many dedicated and conscientious physicians.

*After the publication of the book in June, 1933, Dr. L. S. Gorsline retired from this committee and three others were appointed: Stuart Pritchard, M.D., of Battle Creek, I. W. Green, M.D., of Owosso, and Phil Riley, M.D., of Jackson. The readjusted committee, with Henry Luce, M.D., of Detroit, as Speaker of the House, was responsible for the Mutual Health Service program. Later, Ferris Smith, M.D., of Grand Rapids, and Ralph Pino, M.D., of Detroit, became members of this same study committee, and it was due to Ralph Pino's untiring efforts that the study continued. He was chairman when the final work was being done leading to the establishment of Michigan Medical Service.

The course has been outlined; the final and ultimate result, even more than in the past three decades, must depend upon the cooperation and the effective services given by *all* of our members. It is up to the general membership of the Society now to carry through and see that the plans and obligations are extended and consummated; that the pledges and promises of the Michigan State Medical Society as expressed by our leaders and our House of Delegates are meticulously performed; that the preservation of our dignity and of our laboriously established goodwill through the years is a truly devoted picture; and that there will be no misuses or untoward burdens. Our public is at attention and every member is obligated to carry through as a duty to his patients and his confreres.

FEDERAL LEGISLATION

Congress has now adjourned. The senators and congressmen are at home and available for conversation and contacts; in fact, they are anxious to make these contacts with their constituents. There are some things the medical profession is especially interested in which could be discussed with them, or letters could be written to them. Of utmost importance is the Jenkins-Keogh bill. Bills of this nature have been in the Congress for over ten years without much progress, but now for the first time a hearing has been announced to start on January 7, 1958. All of our members probably know what the Jenkins-Keogh plan is. It is a program to allow self-employed professional persons to set aside a portion of their income in pension plans and defer income tax payments until those plans materialize in later years as endowments or pensions. At that time they will be taxed according to the prevailing tax.

The plan is one of simple justice. All industrially employed and most salaried persons are in position to take advantage of this reduction in tax now through laws that have been in effect for years, whereby the employer can invest money, which he otherwise would be paying as salary to his employee, in income-producing securities designated to be paid after retirement age in the nature of a pension. Tremendous amounts are being saved now for our friends and many of our neighbors who are in industrial employment. There is no reason professional persons should not be granted the same privilege. Letters to your friends in Congress do sometimes produce results.

THE CROSSROADS

The House of Delegates at the Annual Session, September 23 and 24, 1957, decided the future of the Blue Shield in Michigan. Our subscribers have indicated their desire for extensions of the service contracts. Management of Michigan Medical Service has developed a series of contracts offering the various types of care on full payment, deductible, or coinsurance basis, as the individual group may require.

These services can all, or each separately, be given successfully, if and when the doctors of Michigan decide they are willing and ready to render the care and to recognize the contract provisions. Such must be done or no group medical care program can succeed. Approximately half of the service contracts are to be renewed within a few months. Labor has protested: (1) the overutilization and misutilization leading to extra costs and increased rates, (2) has announced its goal of government medicine, and (3) has organized a "Community Health Association" prepared and ready to issue medical service contracts if and when their leaders or they themselves may decide.

The Michigan State Medical Society in an utterly new field put our Blue Shield plan in operation with over seventy thousand subscribers in a very few months. Our doctors must realize that can be done again—the way has been shown.

Remember Michigan Medical Service is not a rich "insurance" company. It is ourselves, an integral part of the Michigan State Medical Society. No matter what any group may be induced to demand, the future of prepaid medicine is now in the balance. The decision must be made correctly *if independent practice is to prevail*.

Think it over, doctor—the vote of your delegate in September must be proven correct or it could be a vote to submit to control by pressure groups at home or politicians in Washington.

WHAT DO YOU MEAN—"NON-PROFIT"?

One of the chief distinctions between medically sponsored prepayment plans—such as Blue Shield—and the commercial health and accident insurance companies, is that Blue Shield is conducted on a "nonprofit" basis, whereas the insurance companies are frankly business enterprises operated to earn a profit for their owners.

To state this difference is not to imply any criticism of either. The insurance companies have a long and honorable history of public service and they are an important part of America's business community.

Blue Shield, on the other hand, serves largely as an agency of the medical profession, performing a community service. Initiated by the medical profession, with the help of local industry, labor and civic leaders, Blue Shield is designed for one purpose only: to help people pay for medical services whenever the need for such services arises.

Blue Shield has succeeded in pioneering the medical care prepayment movement because the profession has guided it and supported it. Blue Shield's working capital was the pledge of the participating physician to deliver the medical services that Blue Shield has promised on his behalf.

In some cases, the participating physicians have accepted a fraction of scheduled Blue Shield payments in order to tide an infant plan over its early trials. In every case, local professional leaders have given their local Blue Shield Plans incalculable hours of service as trustees and advisers. None has ever accepted one penny of compensation for such service as a committee member or trustee. As an agency of the medical profession, created for the sole purpose of facilitating the doctor's job of service to his patients, there has never been any need (for any third party) to make a profit out of the Blue Shield transaction.

Blue Shield's success is measured by the proportion of its income dollar that is expended for services to subscribers, the smallness of its operating costs and the quality of its doctor-support—not by the size of its reserves or its net earnings.

These earnings—these profits, if you will—belong to the subscriber.

"Nonprofit" does not mean *no* profit. Much less does "nonprofit" mean a profit-less operation. "Nonprofit" in Blue Shield means that the earnings of the Plan belong to the subscribers who support the Plan.

The symptom-complex which is officially designated as pernicious anemia may, in many of its features also betray malignancy of the stomach, and particularly of the right colon sector. * * *

A neoplasm may attain a considerable size without causing serious obstruction of the right colon.

NO KNOWN CONTRAINDICATIONS

ROLICTON[®]

permits high dosage,
more effective diuresis in more patients

The low incidence of side action with Rolicton (brand of amisometradine) permits high dosage, extending the range of effective diuresis to a greater number of patients than was previously possible.

Laboratory studies demonstrate that Searle's new oral diuretic, Rolicton, causes positive diuresis with an essentially balanced excretion of water, sodium and chlorides.

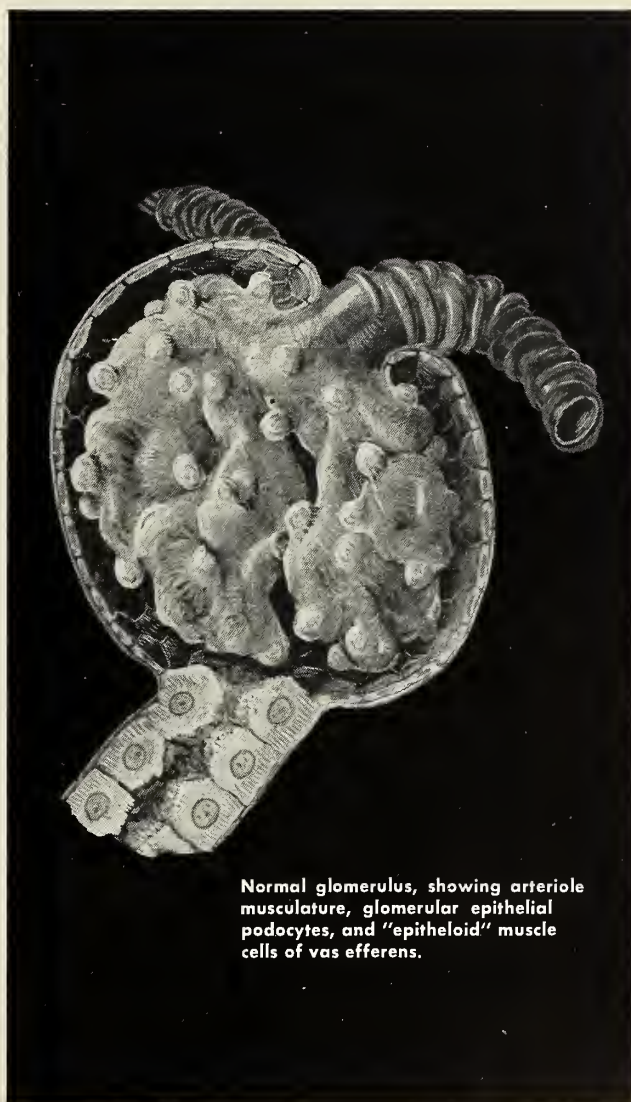
Settel¹ studied the effect of Rolicton in forty-seven patients and found no serious side effects. Assali, who observed the action of Rolicton in five patients with severe toxemia of pregnancy, states² that side actions are essentially non-existent. Side actions of such low incidence, together with its diuretic efficacy, suggest a high order of usefulness for Rolicton.

One tablet of Rolicton, b.i.d., is usually adequate to maintain patients free of edema after the first day's dosage of four tablets. Some patients respond well to one tablet daily. G. D. Searle & Co., Chicago 80, Illinois. Research in the Service of Medicine.

1. Settel, E.: Rolicton[®] (Aminoisometradine), a New, Nonmercurial Diuretic, *Postgrad. Med.* 21:186 (Feb.) 1957.

2. Assali, N. S.: Personal communication, May 28, 1956.

SEARLE



Normal glomerulus, showing arteriole musculature, glomerular epithelial podocytes, and "epitheloid" muscle cells of vas efferens.

Michigan's Department of Health

Albert E. Heustis, M.D., Commissioner

ASIAN STRAIN INFLUENZA

There are four main types of influenza viruses titled A, B, C, and D. Within each type, various new strains develop from time to time. Currently, we have a new strain that has developed within type A. This new strain or variant of type A influenza virus was first identified from a case of influenza that was part of an outbreak of the disease in Asia. As a result it was designated as the Asian or Far East strain. Public fancy immediately labeled influenza resulting from this variant of type A influenza virus as "Asiatic Flu." This is unfortunate, because it gives the public the impression that they are faced with an invasion of a rare exotic type of disease. That which is more unfortunate is that it carries with it the fear of the unknown. It would have been better had the new strain been called just another variant of type A influenza virus, which is actually all that it is.

This new strain of type A influenza virus has certain characteristics that help to remove fear once the truth concerning it is known. It causes a relatively mild disease, has few complications, and results in almost no fatalities.

Symptoms.—One of the characteristics of any "touch of the flu" is that its onset is abrupt with few or no premonitory symptoms. The time lapse from exposure to illness among susceptibles is frequently less than twenty-four hours. The fact that a group of people working or living together in close quarters become ill at the same time seems to breed hysteria away beyond the importance of the affliction. The symptoms can be any or all of the following: fever, chills, headache, sore throat, cough, and soreness in the back and limbs. Although the temperature may reach 102 to 103° F., the illness is short-lived and lasts only two to three days. However, it leaves the patient exhausted and feeling that he has gone through an illness of long duration.

Treatment.—No medicine as yet known will cure influenza. The antibiotics are useless and could be harmful, and should be used only if complications, such as pneumonia, appear imminent. The only thing to do is to go to bed and let nature work for you. Another advantage of bed rest is that the patient is not circulating and spreading the virus. By the same token a person with the "flu," Asiatic, Far Eastern or otherwise, should not have visitors—solely for his own good, since visitors bring in bacterial contaminants that can result in serious secondary infections for a person already ill from influenza.

Precautions.—When influenza of any type is prevalent in a community, the air is so laden with flu viruses

that it is impossible to avoid getting into the path of coughs and sneezes of those already infected but not yet "sick enough" to go to bed.

There are, however, a few precautions that can be taken. One can avoid a maximum exposure by avoiding crowds, insofar as possible. Proper rest and proper food are of major importance in overcoming bacterial invaders that are actually the cause of mortality in influenza.

Prevention.—The influenza vaccine we now have is not of any value in preventing so-called Asian or Far East influenza, since it does not contain any substances that will result in the development of antibodies against this new variant of influenza virus type A.

It does, however, appear likely that a vaccine designed specifically to combat this variant will be available at some later date. This vaccine, when available, will offer about 70 per cent protection. It is probable that the supply will be limited. However, there are no indications at this time that this new strain of influenza virus type A has any of the deadly characteristics of the influenza virus that was so devastating during 1918-1919.

Sensible, sane, sanitary living should suffice. Certainly, there is no reason for panic.

POLIO NOTE

Of the 235 cases of poliomyelitis reported this year, only forty-five are paralytic and the remaining 190, are reported as nonparalytic. Normally paralytic and nonparalytic are about 50-50.

NEW LOCAL HEALTH DIRECTORS

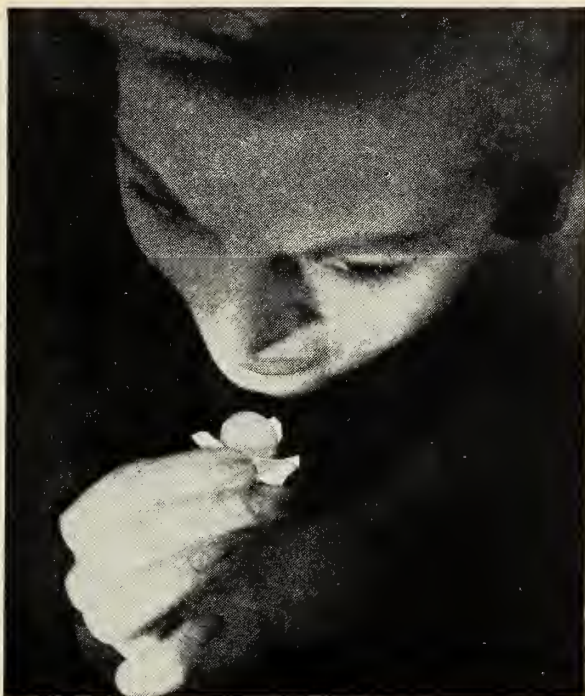
John S. Wisely, M.D., became Director of the Lenawee County Health Department on August 1.

Earl Hasty, M.D., was appointed Director of District Health Department No. 2 as of July 1.

Dorothy V. DuVall, M.D., was named Director of the Chippewa-Luce-Mackinac Health Department, effective August 2.

A. B. Mitchell, M.D., formerly Director of the Allegan County Health Department, became Director of the combined Shiawassee-Livingston District Health Department on August 1. The Shiawassee County office is in the Courthouse at Corunna and the Livingston office is in the Courthouse Annex in Howell.

More babies are being born in hospitals and with a doctor in attendance than ever before, Health Information Foundation reports. In 1935, only 37 per cent were born in hospitals and 13 per cent of all births were unattended by doctors. In 1956, almost 95 per cent were hospital-born, and doctors attended 97 per cent of all births.



Tastiest way to dissolve sore throat symptoms



(HYDROCORTISONE-BACITRACIN-TYROTHRIN-
NEOMYCIN-BENZOCAINE TROCHES)

Adult or juvenile, your patients with sore throats will welcome a course of HYDROZETS. These newest Merck Sharp & Dohme troches offer anti-inflammatory, anti-infective and analgesic properties that promptly alleviate distressing mouth or throat irritation whether caused by infection, mechanical injury or allergic reaction. And HYDROZETS taste so good, it's hard to believe they're medicine.

Formula: Each HYDROZETS Troche contains—2.5 mg. 'HYDROCORTONE' to reduce pain, heat and swelling; 50 units Zinc Bacitracin, 1 mg. Tyrothricin and 5 mg. Neomycin Sulfate to combat gram-positive and gram-negative bacteria; and 5 mg. Benzocaine for rapid soothing analgesia.

Other indications: As adjunct therapy in aphthous ulcers, acute and chronic gingivitis and Vincent's infection.

Supplied: Vials of 12 troches.



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In Memoriam



Ray S. Morrish, M.D., Flint physician and surgeon and prominent civic leader, died August 13, 1957, at the age of sixty-nine.

Doctor Morrish was president of the Michigan State Medical Society in 1945 and was a former secretary and president of Genesee County Medical Society. He was also active in numerous medical groups and was a former president of the Flint Academy of Surgery.

Dr. Morrish's grandparents came to Michigan from England in 1850 and settled in Flint Township. The family had a farm which is now part of Bishop Airport. He received his doctor of medicine degree from the University of Michigan in 1912.

During World War I, he entered the Army Medical Corps as a lieutenant. He served a month at Ann Arbor, then became assistant commander at the Base Hospital at Camp Shelby, Mississippi, where he rose to the rank of major.

Returning to Flint, he began a series of postgraduate studies in surgery, tuberculosis, traumatic surgery and tumors and malignancies.

He taught residents and interns at Hurley Hospital from 1931 to 1940 and also classes at Wayne State University and the University of Michigan. He was director of general surgery at Hurley from 1931 to 1940.

Dr. Morrish limited his practice to surgery. He was on the staffs of Hurley Hospital and St. Joseph Hospital and was acting assistant surgeon for the Veterans Administration from 1919 to 1938.

Serving on the board of directors of the Genesee Red Cross Chapter from 1924 to 1951, Dr. Morrish was its chairman from 1939 to 1946. He was also chairman of a fourteen-county Red Cross regional co-ordinating committee.

Dr. Morrish was a fellow of the International College of Surgeons and was certified as a specialist in general surgery by the International Board of Surgery.

Aura Andrews Hoyt, M.D., of Battle Creek, for twenty-four years health officer of the community, died August 8, 1957, at the age of seventy-seven.

Dr. Hoyt graduated in medicine at the University of Michigan and, after his internship in New York City, practiced in the west for one year before returning to Battle Creek.

After his retirement as health officer in July, 1944, Dr. Hoyt entered private practice and continued as director of public clinics conducted by the health department.

Charles W. Heald, M.D., Battle Creek physician, died of a heart ailment August 6, 1957, at the age of eighty-one.

Before entering the medical profession, Dr. Heald attended the Battle Creek College and afterward engaged in religious work for the Seventh-Day Adventist Church, serving in various communities as assistant to pastors. He later attended the American Medical Missionary College of Medicine, graduating in 1906.

Dr. Heald was born in Fairfield, Iowa, July 7, 1876.

Alvin J. Swingle, M.D., Benton Harbor physician and surgeon, died August 1, 1957, of a heart attack. He was forty-six years old.

Born September 15, 1911, Dr. Swingle graduated from Ohio State University Medical School in 1937 and began his practice of medicine in Mandan, N. D. Upon entering the U. S. Medical Corps, World War II, he rose to the rank of lieutenant colonel and was a member of a surgical team in the European theater.

After the war, Dr. Swingle taught surgery at Marquette University, before coming to Benton Harbor in 1949.

Dr. Swingle was active in civic and fraternal affairs. He was a member of Lake Shore Lodge 298, the Masons; the DeWitt Clinton Consistory, Commander of the Saladin Temple. He was a member of the Kiwanis Club and active member of Saron Lutheran Church, St. Joseph.

Frederick G. Novy, M.D., Ann Arbor, died August 8, 1957, at the age of ninety-two.

Born in Chicago, Frederick Novy received his early schooling there. He served on the University of Michigan faculty for forty-nine years, heading its bacteriology laboratory from 1902 until his retirement in 1935. His last two years of active service were as dean of the medical school.

In 1891, he established the first credit course in bacteriology in any American university.




Dr. Novy brought to the new laboratory his training in Germany and France under Louis Pasteur and Robert Koch, and a demand for strict attention to scientific procedure. He discovered and named many micro-organisms, among them Novyi, which causes relapsing fever. He developed antiseptics and in 1903 introduced new methods for cultivation of blood parasites—methods still used today.

Dr. Novy was a pioneer in the study of allergies and laid the groundwork for modern antihistamines. Much laboratory apparatus he invented still bears his name.

All three of his sons are doctors of medicine and his two daughters are married to physicians: Robert L. of Detroit; Frank O. of Saginaw; Frederick G. of Berkeley, California; Mrs. Warren C. Lambert of Marquette and Mrs. Archibald Diack of Portland, Oregon.

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 maximum  hematologic
 response—avoids interruption of
 therapy  due to g.i. irritation
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DROPS—Each cc. provides 16 mg. of iron and 48 mg. of choline base. M.D.R. for infants and children up to 6 years is 0.5 cc.

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Supplied: Tablets: Bottles of 100 and 1000; Syrup: Pints and gallons; Drops: 30-cc. dropper bottles.

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 experimental proof, write for
 complete literature



MEDICAL AUTHORS

Jack Kevorkian, M.D., Pontiac, is the author of an article entitled "Rapid and Accurate Ophthalmoscopic Determination of Circulatory Arrest," published in the *Journal of the American Medical Association*, August 10, 1957.

William D. Robinson, M.D., Ann Arbor, is the author of an article entitled "Current Status of the Treatment of Gout," published in the *Journal of the American Medical Association*, August 10, 1957.

J. Reimer Wolter, M.D., Ann Arbor, is the author of an article entitled "Innervation of the Corneal Endothelium of the Eye of a Rabbit," published in *AMA Archives of Ophthalmology*, August, 1957.

Klaus Hergt, M.D., and John L. Langin, M.D., Bay City, are the authors of an article entitled "Serum Transaminase Determination," published in the *Journal of the Medical Sciences*, January, 1957.

Albert D. Reudemann, Jr., M.D., Detroit, is the author of an article entitled "Automobile Safety Device—Headrest to Prevent Whiplash Injury," published in the *Journal of the American Medical Association*, August 24, 1957.

W. D. Robinson, M.D., of Ann Arbor, is author of a special report, "Current Status of the Treatment of Scalps," which appeared in *JAMA* of August 10, 1957.

A. D. Ruedemann, Jr., M.D., of Detroit, is the author of an interesting article under "Clinical Notes" in *The Journal of the American Medical Association*, August 24, 1957. The subject of the note is "Automobile Safety Device—Headrest to Prevent Whiplash Injury."

J. R. Simpson, M.D., et-al, authored an original article, "Serum Lactic Dehydrogenase—a Diagnostic Aid in Myocardial Infarction" which appeared in *JAMA* of September 7, 1957.

Vance Fentress, M.D., and D. J. Sandweiss, M.D., of Detroit, are authors of an original article, "Segal's Tubeless Gastric Analysis with Azure, a Resin Compound," which appeared in *JAMA* of September 7, 1957.

* * *

Seminar on Chronically Ill.—The State of Michigan Office of Hospital Survey and Construction called and sponsored a three-day meeting, a seminar on the chronically ill, at Haven Hill Lodge on May 26, 1957. The opening meeting on Sunday evening, May 26, featured a talk and a discussion on Michigan's changing health picture led by Vlado Getting, M.D., of the University of Michigan School of Public Health. This was a discussion of the health picture which is changing from one of acute illness to one of chronic illness within local communities; and hospitalization and medical care in

the future is going to have to be aimed along these lines more than it has been in the past. Dr. S. J. Axelrod from the University of Michigan Department of Public Health reported on his survey of medical facilities in Michigan, which had been primarily devoted to the Ingham County area, in which a rather detailed study had been made. It was a report of available services, recommendations to be made later. There were some inaccuracies noted in relations to numbers and types of units, but, in general, it was a most informative report.

The rest of Monday was devoted to discussions in groups in relation to the problems of community care for the chronically ill. The group was broken into four separate study groups, which discussed the problems in general, each bringing in their report; in the evening, these reports were all consolidated into three main phases: (1) improved methods of care, (2) improved methods of economics, and (3) prevention of and education for chronic disease. The recommendation of most interest to the medical profession was the urging that medical personnel accept more responsibility regarding the problems of chronic illness and the long term patient within the community, and that this be considered not only an individual patient problem but also an interesting community problem.

In the groups, most of the discussion centered upon methods of improved care, finances including prepaid insurance, and prevention or education to prevent chronic illness. It was suggested that the community should recognize that the chronically ill or handicapped represent an honorable state and not one to be frowned upon, and that the number of such individuals in the hospitals is a reflection on the moral, physical, social, emotional and economic environment of the community. The problem of assimilating the chronically ill as part of the community is an interesting problem, and the answer is not necessarily in brick and mortar and hospital beds, but in a better organized community approach to the problem and better use of home care. Discussions revolved around the doctors' offices or clinics, general hospital care, the chronic disease hospital, nursing homes, and home care. The final recommendation was for the development of (1) a pilot program to cover all of the aspects of the community in relation to the problems of the chronically ill, and (2) a pilot or trial program for further development and experimentation in relation to prepaid insurance.

* * *

The International College of Surgeons has announced two European congresses. One met in Vienna, October

(Continued on Page 1310)

CORN OIL is a Prime Source of UNsaturated Fatty Acid

Numerous clinical studies emphasize its efficacy in the reduction and control of serum cholesterol levels



Physicians are quite aware of the rapidly growing appreciation of the role of dietary lipids in health and disease. Accumulating metabolic studies throughout the world indicate that serum cholesterol levels may be influenced more by the *kind* than by the *amount* of the dietary fat.

Unsaturated fats tend to depress serum cholesterol levels in many patients, whereas saturated fats may have the opposite effect. Medical references on this subject, as well as other findings concerning unsaturated fatty acids in nutrition, may be found in the book, "Vegetable Oils in Nutrition."

Mazola Corn Oil is an excellent source of *unsaturated* fatty acids...85% of its component fatty acids are unsaturated...average values being 55% linoleic acid, 30% oleic acid. Mazola is unadulterated corn oil in its natural form...*not* flavored, *not* blended, *not* hydrogenated. Well tolerated, easily digested, readily absorbed, Mazola is also an excellent carrier for fat soluble vitamins.

Mazola Corn Oil is widely used for salad dressings, in frying, cooking and baking... and thus may be included palatably in great variety as a replacement for part of the daily fat intake.

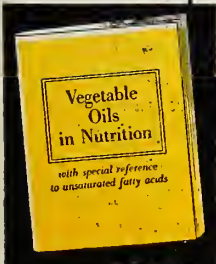
COMPARATIVE COMPOSITIONS OF FOOD FATS AND OILS										
Fatty Acids as Percentage of Total Acids										
Fat	Saturated		Oleic		Linoleic		Linolenic		Arachidonic	Iodine Value
	Ave.	Range	Ave.	Range	Ave.	Range	Ave.	Range	Ave.	Average Range
Butter	—	46-48	—	—	4.0	—	1.2	—	0.2	— 26-42
Coconut oil	—	75-88	—	5-8	—	1.0-2.5	—	—	—	— 7-10
Corn oil	13	11-15	—	23-40	56	46-66	—	0.0-0.6	—	126 113-131
Cottonseed oil	26	21-30	27	22-36	47	34-57	—	—	—	105 90-117
Lard	43	—	46	—	10	15.6	0.5	—	0.5 (2.1)	— 53-77
Linseed oil	—	6-12	—	13-31	—	10-27	—	30-64	—	— 170-204
Margarine	23	15-23	62	59-77	5.8	5-11	—	0.1-0.9	0	81 74-85
Olive oil	—	8-16	—	53-86	—	4-20	—	—	—	— 80-88
Peanut oil	17	14-22	54	44-65	29	20-37	—	—	—	98 90-102
Shortening	25	17-45	62	43-79	5	3-12	—	0.2-0.6	0-0.5	78 59-80
Soybean oil	15	11-18	25	18-58	55	28-62	5.1	0.3-10	—	130 100-143
Tallow (beef)	53	—	42	—	4	5.3	0.5	—	0.5	— 40-48

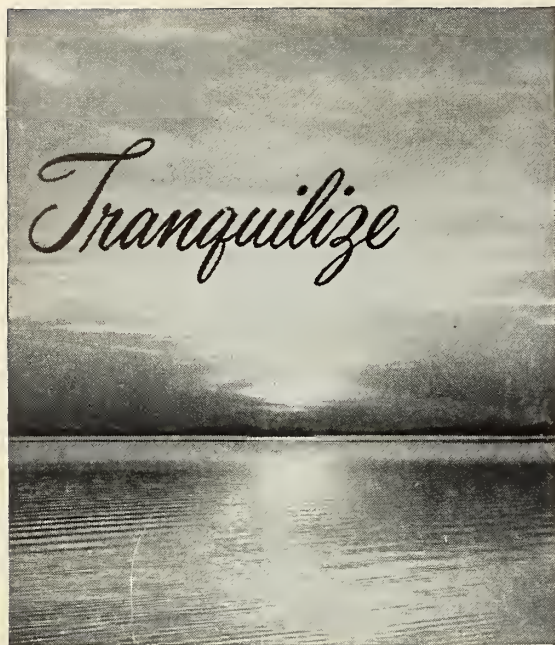
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TO PHYSICIANS interested in the study and management of high cholesterol blood levels, this most recent monograph will provide helpful information. It is free on request. Write to: Corn Products Refining Company, 17 Battery Place, New York 4, N. Y.



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- Soothes the central nervous system, produces calmness without hypnosis.
- Non-toxic, non-cumulative, non-addicting, no known contraindications.
- Does not impair mental or physical function.
- Orally effective within 30 minutes for sustained action up to 6 hours.
- Economical.

Indications: Tension, nervousness, anxiety and muscular spasm.

*Supplied: White round tablets
Acetylcarbromal 5 gr. in bottles
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(Continued from Page 1308)

18-20, 1957, and the other will convene in conjunction with the World's Fair in Brussels, May 15-18, 1958. The Vienna Conference was under the auspices of the Vienna section of the International College of Surgeons, and under the direction of Dr. Felix Mandl and Professor Leopold Schonbauer, both of the surgical department of the University of Vienna. The meeting brought together the German, Austrian, Dutch, Swiss, and other sections. About seventy-five papers were presented. The sessions were held in the Billroth-Haus in Vienna. Information about the May meeting is available at the headquarters' office, 1516 Lakeshore Drive, Chicago 10, Illinois.

* * *

The doctor draft law went out of existence on June 30 after nearly seven years on the federal books. Figures collected by the selective service headquarters show that forty-five priority 1 and priority 2 physicians and twenty-seven dentists remain in the 1-A pool, and 337 physicians and 101 dentists in the same priorities, were deferred for vocational essentiality, and 1,768 physicians and 555 dentists in priorities 1 and 2 hold deferment as 4-F's.

* * *

Poliomyelitis Literature.—The National Foundation for Infantile Paralysis maintains a listing of all articles on poliomyelitis published in the United States and abroad, and publishes it monthly. The June listing just received, contains 104 titles, of which Michigan furnished two: "Mechanisms of Persistent and Masked Infections in Tissue Culture," *Annals New York Medical Society*, April, 1957, by W. W. Ackerman, University of Michigan Virus Laboratory, Ann Arbor, and "The Nature of the Formalin Inactivation of Poliomyelitis Virus," *Journal Immunology*, June, 1956, by E. A. Timm, I. W. McLean, Jr., C. H. Kupsky, and A. E. Hook, Parke-Davis, Detroit.

* * *

The August number of the Blue Shield Medical Care Plans Newsletter devoted almost two pages to quotations from THE JOURNAL OF THE MICHIGAN STATE MEDICAL SOCIETY for June. It quoted extensively from the articles by L. Fernald Foster, M.D., President of Michigan Medical Service, George W. Slagle, M. D., President-Elect of the Michigan State Medical Society, and J. C. Ketchum, Executive Vice President of the Plan. In closing the article, the editor remarks: "Each year when the Blue Shield issue of *Michigan Medical Journal* appears, it stands as one of the outstanding examples of productive professional relations. The same kind of annual Blue Shield edition could well be made a part of every state medical publication so that all doctors, everywhere, might understand more fully and completely the role of physicians in further developments essential to the continuation of voluntary health care coverage under the leadership of physicians."

* * *

Top Trophy to Michigan.—Michigan Blue Cross-Blue Shield was named winner of the top trophy for its 1956-

(Continued on Page 1312)

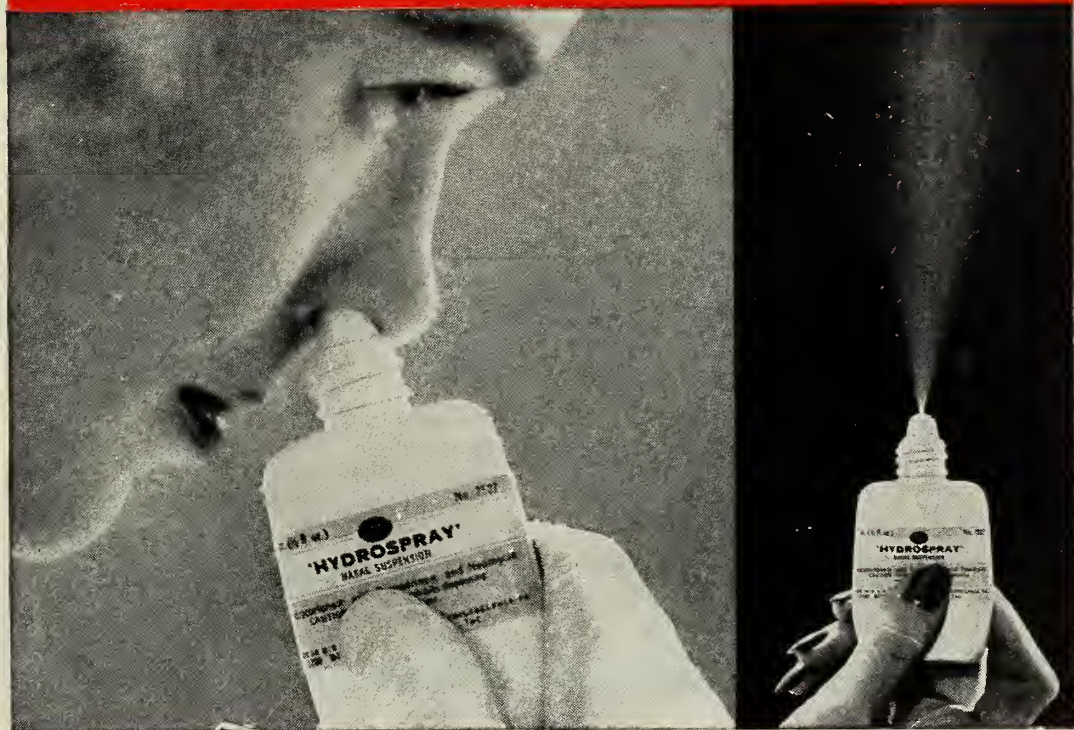
'Hydrospray'

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*Anti-inflammatory—
Decongestant—Antibacterial*

MAJOR ADVANTAGES: New synergistic anti-inflammatory, decongestant and antibacterial formula. High steroid content assures effective response.



Topically applied hydrocortisone¹ in therapeutic concentrations has been shown to afford a significant degree of subjective and objective improvement in a high percentage of patients suffering from various types of rhinitis. HYDROSPRAY provides HYDROCORTONE in a concentration of 0.1% plus a safe but potent decongestant, PROPADRINE, and a wide-spectrum antibiotic, Neomycin, with low sensitization potential. This combination provides a three-fold attack on the physiologic and pathologic manifestations of nasal allergies which results in a degree of relief that is often greater and achieved faster than when any one of these agents is employed alone. **INDICATIONS:** Acute and chronic rhinitis, vasomotor rhinitis, perennial rhinitis and polyposis.

SUPPLIED: In squeezable plastic spray bottles containing 15 cc. HYDROSPRAY, each cc. supplying 1 mg. of HYDROCORTONE, 15 mg. of PROPADRINE Hydrochloride and 5 mg. of Neomycin Sulfate (equivalent to 8.5 mg. of neomycin base).



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PHILADELPHIA 1, PA.

REFERENCE: 1. Silcox, L. E., *A.M.A. Arch. Otolaryng.* 60:431, Oct. 1954.

(Continued from Page 1310)



BURDICK UT-1 ULTRASONIC UNIT

Clinical reports, both here and abroad, have been in agreement on the value of ultrasound in the following conditions:

Traumatic Injuries • Osteoarthritis • Periarthritis
Fibrositis • Painful Neuroma • Rheumatoid Arthritis
Bursitis • Rodiculitis • Scars

A compilation of detailed clinical reports and ultrasound technics is available upon request from the Burdick Corporation.

The Burdick UT-1 Ultrasonic therapy unit is a tested result of pioneering in this field. It features a coupling signal that warns when contact is inadequate for effective treatment. The right-angled applicator and flexible cable add ease to operation. Burdick also has a smaller, portable machine—the UT-4. We will be happy to demonstrate both machines to you at your convenience.



The UT-1 and UT-4 are sold through 296 qualified medical supply houses throughout the United States. Over 1,500 Burdick sales representatives are backed by complete service facilities for all Burdick equipment.

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57 public relations program at the annual Blue Cross-Blue Shield Public Relations Institute held at the University of Wisconsin, August 15, 1957. The Michigan Blue Cross-Blue Shield entry, one of fifty submitted by the eighty-six Plans in the United States, Canada and Puerto Rico, was selected Grand Winner in the overall judging on the basis of its "systematic realization of planned objectives." Louis Graff, Director of Public Relations and Advertising of Michigan Blue Cross-Blue Shield, accepted the award at the Annual Award Dinner.

In accepting the award, Graff said: "Few institutions conceived in the public interest, as is Blue Cross, have a greater moral challenge to bridge the gap between health problems, which are apparent to everyone, and financial solutions which are exceedingly complex, often obscure." . . . "Our basic task in communications," he added, "is to convince the public that we understand the emotional and economic worry associated with human illness. And more than that, to demonstrate through our combined creative restlessness that we in Blue Cross are still pioneers in finding solutions to these problems." . . . "Inescapably," Graff concluded, "our public relations task tie us to the welfare of the community and to the well-being of the individual."

Those judging the entries were: Harry E. Clark, *Family Week Magazine*; Alton D. Farber, J. Walter Company; and, Robert Cunningham, Editor, *Modern Hospital*.

* * *

The National Disease and Therapeutic Index, a research project of Taylor, Harkins and Lea, Inc., Philadelphia, has published its first report in July, 1957, a mimeographed copy of twenty-one pages. This report covers neoplasms as seen by practicing physicians. This survey is a unique research project designed in the hope of providing a continuous flow of reliable basic facts on medical practice in the United States. Each of the panel of more than eight hundred participating physicians reports on all private patient visits during a forty-eight-hour-period, once each quarter. Approved statisticians then take the information and analyze it. The study was sponsored and supported by four leading ethical pharmaceutical manufacturers: Ciba, Eli Lilly, Smith, Kline and French, and the Upjohn Company. The study started in February, 1956, and from February 1 through December 31, they collected information on a total of 91,801, patient visits. Of this 91,801, 2,536, or 2.8 per cent, were recorded with diagnosis of neoplasm. 35.2 per cent were benign neoplasms, 9.1 per cent were neoplasms of unspecified nature, 1.5 per cent were malignant neoplasms of the buccal cavity and pharynx, 10.2 per cent were malignant neoplasms of digestive organs and the peritonium, 4.7 per cent were malignant neoplasms of the respiratory system, 19 per cent were malignant neoplasms of breast and genito-urinary organs, 12.1 per cent malignant neoplasms of other and unspecified sites, 8.2 per cent were malignant neoplasms of lymphatic and hematophytic tissue.

(Continued on Page 1314)

NEW

For—
*quick symptomatic relief
 or prophylaxis in
 urinary tract infections*

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TRADEMARK

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THE TRIPLE SULFA

Sulfadiazine 100 mg.
 Sulfamerazine 100 mg.
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An *improved* combination including sulfacetamide . . . efficient antibacterial of exceptional solubility.¹ Offers wide-spectrum activity with low dosage, minimal danger of crystalluria or sensitization.² Preferred to antibiotics because drug resistance or superinfection is less likely.³

with the DOUBLE PLUS...

✚ Ext. Hyoscyamus . 5.75 mg.
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✚ Potassium Citrate . 200 mg.

Antispasmodic action of hyoscyamus quickly relieves pain, irritation, burning, urgency.⁴

Alkalinizing and diuretic effects of potassium citrate enhance sulfonamide solubility and safety.⁴



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1. Kerley, L., and Headlee, C. P.: J. Am. Pharm. A. (Scient. Ed.) 45:82, 1956. 2. Lehr, D.: Special Exhibit, Mod. Med. 23:111, No. 2, 1955. 3. Editorial, J.A.M.A. 160:210, 1956. 4. Bastedo, W. A.: Materia Medica, Pharmacology, Therapeutics and Prescription Writing, ed. 4, Philadelphia, W. B. Saunders Company, 1937, pp. 514, 101.

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Important Announcement of Arteriosclerosis Treatment

GEROT PHARMACEUTIKA, owners of United States Letters Patent #2-776-973 issued January 1957 to Gerhard Gergely of Vienna, Austria, have licensed MEYER AND COMPANY of Detroit, Michigan, to synthesize and market 3, 7-dimethyl-xanthine double salt in the United States of America.

3, 7-dimethyl-xanthine double salt with oleic acid and magnesium, a stable compound marketed in Austria since 1950 under the name "Perskleran" and used in the treatment of ARTERIOSCLEROSIS is being marketed by MEYER AND COMPANY under the trade name of "Athemol."

The product is now available in tablet form.

Literature and clinical samples are available on request.

MEYER AND COMPANY

Pharmaceutical Manufacturers

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Detroit 24, Michigan

(Continued from Page 1312)

Peripheral Vascular Disease.—A 16-millimeter film in color with sound has been prepared showing the widespread occurrence of peripheral arterial and venous circulatory disease. A recent survey shows more than 4,808,000 known cases in the United States alone. More than a million new cases arise every three years, of which from 50 to 65 per cent are considered more or less permanent and requiring periodic or continuous treatment. The film runs thirty-two minutes. Arrangements for showing the film can be made by writing to Medical Film Guild, Ltd., 506 West 57th St., New York 19, or Arlington Funk Laboratories, 250 E. 43rd St., New York 17. Please advise if you have available the necessary projection equipment, and at least thirty days' notice should be given.

* * *

Influenza 1957.—In co-operation with the United States Public Health Service, Wyeth Laboratories has produced a book with twenty-nine mimeographed pages giving the complete story of the Asiatic Flu, discussing diagnosis, testing, prevention, and treatment of the disease. One hundred and fifty thousand copies of the booklet are being distributed to the medical profession. It may be had upon request to Joseph E. Dooley, Public Relations, Louis N. Gilman, Inc., 1528 Walnut St., Philadelphia 2, Pennsylvania. This book contains a very interesting history of influenza, known in ancient times, which has produced many pandemics, the most famous one being in 1918 which took 20,000,000 lives.

* * *

Liaison Committee with University of Michigan.—The Michigan State Medical Society has a liaison committee with the University of Michigan, consisting of Bradley Harris, M.D., chairman; F. E. Ludeig, M.D., R. B. Nelson, M.D., and G. C. Wilson, M.D., constituting a Subcommittee on the University Hospital. The Committee has presented problems of the young doctor entering practice to the internes and residents. The presentation was based on the following summation, especially covering the philosophy of the University Hospital and the referring physician:

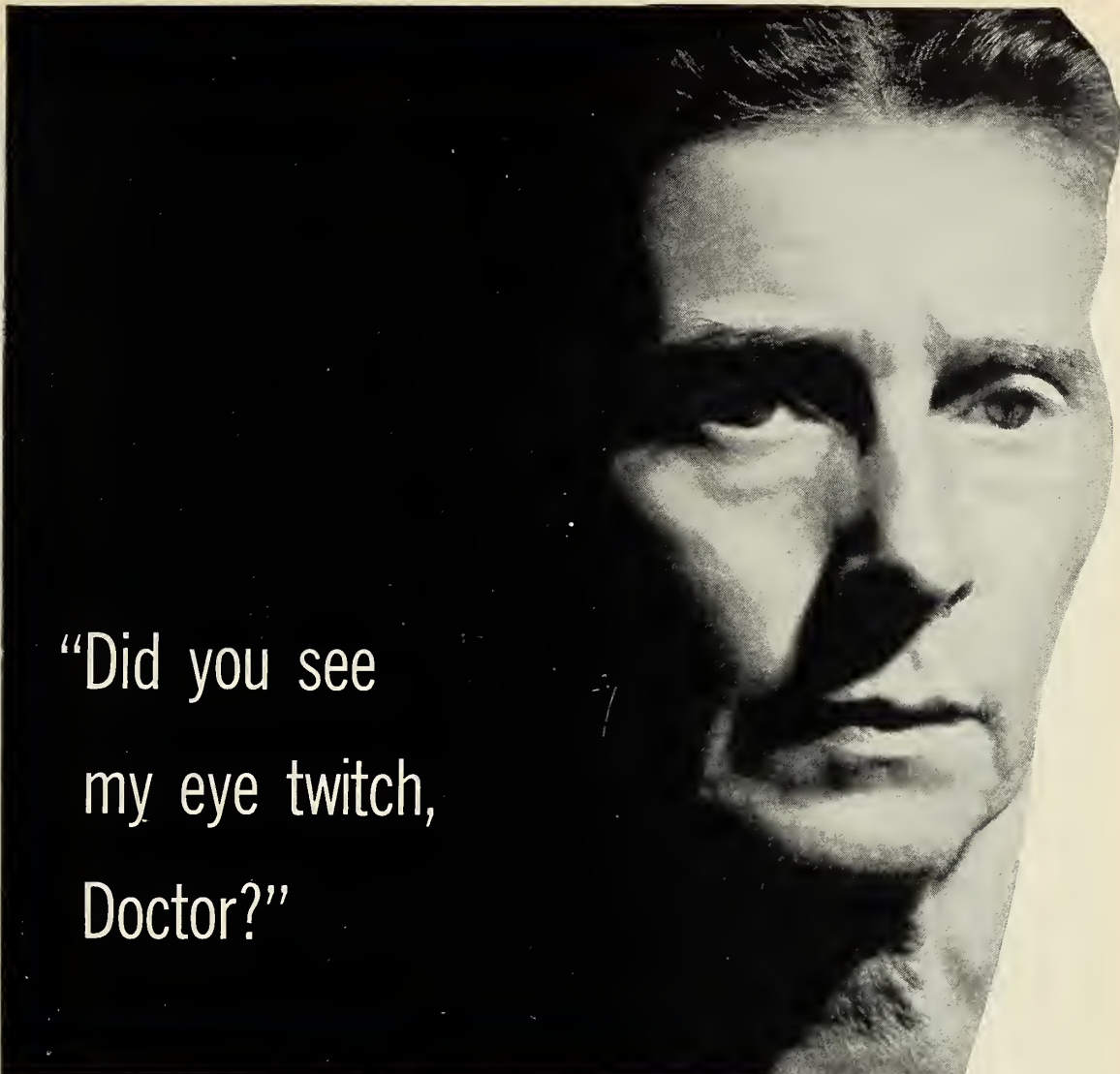
UNIVERSITY HOSPITAL AND THE LOCAL REFERRING PRACTITIONER

A. Introduction

B. Reasons for patient referrals

1. The attempt of the local practitioner to get better and more complete medical care for his patient.
2. To help provide medical material for study for the medical school, interns and residents.
3. Many times the local practitioner desires re-evaluation of chronic illness, hoping that there may be something new for his patient.
4. To provide more complete surgical treatment for his patient when such treatment is not available in his community.
5. Out-patient consultation, such as N.P.I., neurology, tuberculosis, allergy, blood diseases, etc.
6. Many times the local practitioner desires more adequate treatment regimes that he may continue at home.

(Continued on Page 1316)



"Did you see
my eye twitch,
Doctor?"

She's nervous—and depressed at the same time: "I just can't get interested in anything."

You feel that a "tranquilizer" will probably relieve her nervousness—but not her depression. On the other hand, stimulants will relieve the depression—but may magnify her nervousness.

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(Continued from Page 1314)

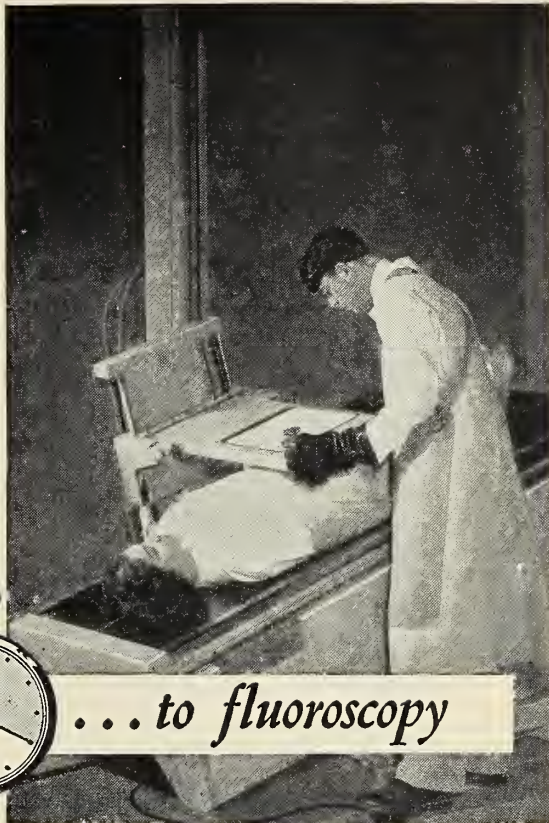
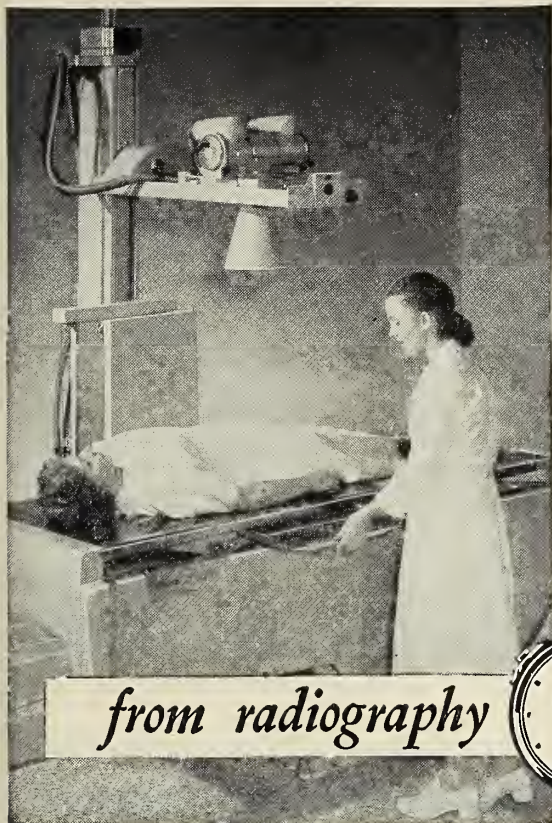
7. Many referrals come to University Hospital because certain counties direct patients to the hospital on the order of the Director of the Poor, by a supervisor, where no doctor may have seen the case. In such instances, there has been no local practitioner.
8. Some referrals are made to the University Hospital because the local practitioner wishes to rid himself of a nuisance patient.
9. Doctors of Osteopathy refer many patients to University Hospital.
 - (a) Twenty per cent of medical care in the State of Michigan is now given by D.O.'s. This means that the D.O. is replacing the general practitioner in many areas throughout the State of Michigan.
 - (b) For your information, there are approximately 1,800 practicing D.O.'s in the State of Michigan, as compared to around 8,000 M.D.'s. At this time, there are 260 Michigan residents now taking courses in Osteopathic schools. As an example, the County of Oakland has 180 practicing Doctors of Osteopathy. All of these refer patients to University Hospital.
- C. Resident and Intern relations with the patient
 1. Remember that most patients have complete faith in their local practitioners.
 2. Use care while speaking in front of the patient about the treatment he has received from his local practitioner. While the treatment may not have been that you would have used yourself, it should not be mentioned as inadvisable treatment in front of the patient.
 3. Careless words can cause dissatisfaction of the patient with his local practitioner and even instigate a malpractice suit against the local practitioner.
- D. How to help the local practitioner.
 1. Get out reports as promptly as possible.
 2. In case of sudden death or serious complications, contact the local practitioner by phone or telegraph.
 3. Be sure patient is properly instructed as to the treatments and medications that he must continue. If the patient is given this information, have him contact the local practitioner as soon as possible after his discharge, so that he may take over.
 4. Many children have reports sent only to the Crippled Children's Commission, so that just writing a letter is not sufficient; giving the information to the patient or the patient's family is most important.
 5. Particular care must be made with children with diabetes and allergies and other serious illnesses. Otherwise, it may be a month before the report gets to the local practitioner.
 6. Remember that in two or three years, you will be the local practitioner.

* * *

Asian influenza vaccine is being put on the market and should be in plentiful quantities by cold weather. The AMA Board of Trustees have appointed a committee on influenza to implement the international and operational phases of the AMA program. This committee is the present committee on National Civil Defense which consists of Harold C. Lueth, M.D.; Cortis F. Enloe, Jr., M.D.; Henry Poer, M.D.; Max L. Lichter, M.D., Detroit; Roscoe L. Sensenich, M.D.

(Continued on Page 1318)

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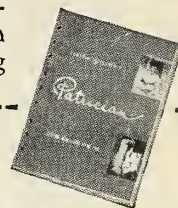
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(Continued from Page 1316)

and Claude W. Steele, M.D., to whom have been added two members of the board: Hugh H. Hussey, Jr., M.D., and James E. Apple. This committee is busy at work. They have recommended that emergency medical service committees of each state medical society be qualified to cope with the special influenza problem.

* * *



Tuberculosis appears to be on the increase among elementary school age children. Despite a 16 per cent drop in active and probably active tuberculosis cases reported for the state as a whole, the number of children under age ten found to have active or probably active tuberculosis rose 10 per cent in 1956 over the figure for 1952, when this breakdown in tuberculosis cases was first made. The greatest increase occurred among children aged five through nine.

In 1952, the Michigan Department of Health reported a total of 4,066 active and probably active tuberculosis cases, of which 329 were children under ten. In 1956 there were 3,402 active and probably active tuberculosis cases, including 362 children under ten. These figures may reflect the rise in birth rate which followed World War II. They also suggest that the sources of tuberculosis infection for children are not being reduced significantly.

* * *

The Medical Economics publication, beginning September, 1957, is issuing a new volume for young doctors preparing to practice medicine—internes, house physicians, residents, and senior medical students. About thirty-five thousand of them are now receiving the new edition prepared especially for them. Much of the material in the regular *Medical Economics* publication will be used, plus a special lead article, entitled "What Practice Set-up Will Suit You Best." This will use charts, tables, and occupy about twenty pages of text. There was also an article about down to earth advice on the relative merits of solo practice, expense sharing, partnerships, group practice, and salaried work. Special articles will appear each month and will take up the particular problems in the young doctor's horizon, how to find a location, how to get a hospital connection, how to set up an office, how to establish fees, et cetera. We believe this will be a very acceptable addition to the young graduate's training.

* * *

The American College of Physicians has arranged for eight postgraduate courses beginning in October. These are open to members and nonmembers at various fees. The first course lasted five and one-half days, October 7-12, 1957, at the University of Pittsburg, Pittsburg, Pennsylvania. The second course was from October 14-18, 1957, at the Medical College of Virginia, Richmond, Virginia. The third, on October 21-25, 1957, was held at the University of Wisconsin Medical School, Madison, Wisconsin. The fourth, October 28 to Novem-

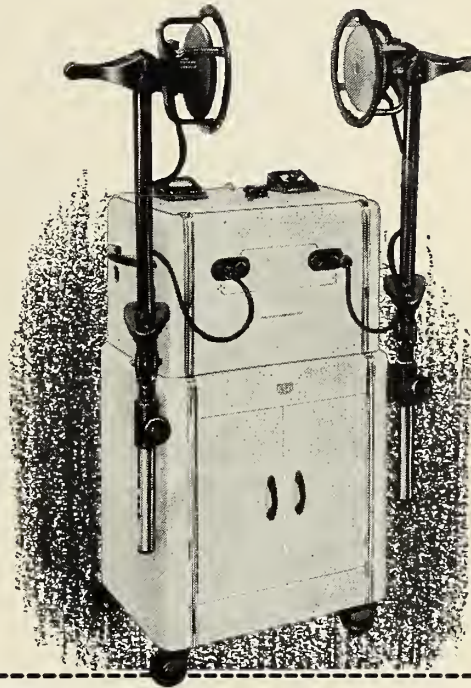
(Continued on Page 1320)

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(Continued from Page 1318)

ber 1, 1957, will be held at Tufts University School of Medicine at Boston, Massachusetts. The fifth, November 1 to 3, 1957, will be at the University of Pennsylvania Graduate School of Medicine, Philadelphia General Hospital, Philadelphia, Pennsylvania. The next, November 18-22, 1957, will be at the National Institutes of Health at Bethesda, Maryland. The seventh, February 10-14, 1958, is scheduled at Duke University School of Medicine, Durham, North Carolina, and the eighth, February 17-21, 1958, at the University of South California School of Medicine, Los Angeles, California. The work at these various schools will be various basic subjects and a complete program may be secured from E. R. Loveland, Executive Secretary, 4200 Pine Street, Philadelphia, Pennsylvania.

* * *

The Ophthalmology Scholarship Fund of the Guild of Prescription Opticians of America, Inc., has announced five additional young physicians who are just beginning their residence training in Ophthalmology. This is a three-year course and the fellowship will amount to \$1,800, paid monthly, over the three years of residency. None of these new fellows is from Michigan; one is from Erie, Pennsylvania, one from Nova Scotia, one from Ontario, one from Georgia, and one from Florida. This brings to eleven the number of recipients. Next year's awards will bring it up to the total of eighteen

fellowships which the Guild expects to continue in operation, new ones being appointed as old ones finish their course.

* * *

Management of Mass Casualties.—The army has announced that special courses for the management of mass casualties are to be conducted during the fiscal year of 1958. The following dates have been selected: September 9-14, 1957; December 2-7, 1957; March 24-29, 1958; and May 12-17, 1958. The AMA Council on National Defense has allotted a quota of two representatives for each course. Those interested in attending the courses should write directly to the Council on National Defense, American Medical Association, 535 N. Dearborn St., Chicago, advising which course is desired. Since there is limited space, they will be handled on a "first come—first served" basis.

* * *

Dr. James Maxwell, Professor of Otolaryngology of the University of Michigan is again giving a course of lectures at the Graduate School of Medicine of the University of Florida, January 27 to February 1, 1958, midwinter session, Miami Beach, Florida.

* * *

The 22nd Annual Convention of the American College of Gastroenterology was held at The Somerset, Boston, Massachusetts, on October 21, 22, and 23. In addition to the many individual papers presented,

(Continued on Page 1322)

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1. Pollock, B. E., and Pruitt, F. W.: *Am. J. M. Sc.*, 226:172, 1953.

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(Continued from Page 1320)

there were panel discussions on Chronic Ulcerative Colitis, Diseases of the Esophagus, Peptic Ulcer and the Management of Massive Gastrointestinal Hemorrhage in Patients with Liver Disease.

On October 24, 25 and 26, immediately following the Convention, Dr. Owen H. Wangensteen, Minneapolis, Minnesota, and Dr. I. Snapper, Brooklyn, New York, were again the moderators of the Annual Course in Postgraduate Gastroenterology, held at The Somerset and in the Joslin Auditorium of the New England Deaconess Hospital.

Honorary Fellowships were presented to Dr. Chester S. Keefer, Boston, Massachusetts, Dr. William W. Frye, New Orleans, Louisiana, Dr. Stafford L. Warren and Dr. Rafe C. Chaffin, both of Los Angeles, California.

* * *

OASI Disability Check.—The number of persons under the new amendment to the Social Security law has grown very rapidly. During August there were more than a hundred thousand disability workers who received checks under the Old Age and Survivors Insurance Disability Payment program. That was the first group to receive these benefits. The program went into effect in July and these payments are for that month.

* * *

Meetings Abroad.—The eighteenth *International Congress of Ophthalmology* will meet in Brussels September 8 to 12, 1958. Elaborate programs have been arranged but anyone who wishes to go should make his reservations immediately in Brussels because the 1958 World's Fair will be there and the city will be crowded with visitors.

The Pan American Association of Ophthalmology, celebrating its eighteenth year with some 2,000 members representing the Western Hemisphere, will hold its Second Cruise Congress on February 1-14, 1958, on board the steamship *Queen of Bermuda*. The itinerary includes a stop of a day each at San Juan, Puerto Rico; Ciudad Trujillo, Dominican Republic; Kingston, Jamaica; Port Au Prince, Haiti; and Nassau, Bahama Islands. Elaborate meetings and reports and program will be conducted on the cruise on board ship and with meetings in each of the cities visited. For information, address Frank H. Constantine, M.D., 30 West 59th St., New York 19, New York.

The Fifth International Congress of Internal Medicine will be held in Philadelphia on April 24-26, 1958. About 1,000 Americans and about 400 overseas physicians are expected to attend. Membership is open and those eligible are invited to make application; papers will be considered. Consult Frank W. Allan, M.D., 605 Commonwealth Ave., Boston 15, Massachusetts.

* * *

The Internal Revenue Department has issued report showing that in the year 1953 there were 145 persons with one million dollars income. That had increased to 201 in 1954. The 1954 records are the latest available and they show that only 1.3 per cent of all taxpayers 543,000 persons, made as much as \$20,000 in 1954, but

(Continued on Page 1324)

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*REFERENCE: J.A.M.A. 163: 359, 1957 (February 2)

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(Continued from Page 1322)

those people received more than 10 per cent of all income and paid nearly 25 per cent of all federal income taxes on individuals. This figure includes only taxable income. Only 3.7 per cent of all taxpayers received from \$10,000 to \$20,000 of income in 1954, but that group received 10 per cent of all income and paid about 12½ per cent of the federal taxes. 29 per cent of all taxpayers received from \$5,000 to \$10,000. They received 39 per cent of all income and paid about 35 per cent of the taxes. Stated in another way, 66 per cent of the taxpayers received less than \$5,000 of income. They accumulated 41 per cent of income and paid 28 per cent of the taxes. (USNWR)

* * *

Doctor Draft.—S. S. Director Lewis B. Hershey has announced officially that doctors and dentists under age thirty-five, otherwise potential inductees in selective service, are not to be drafted. The medical draft law has been discontinued and if these particular men should happen to be on any draft board call list, they are not to be inducted. This applies to any young man holding the degree of Bachelor of Medicine, as well as M.D., D.D.S., D.M.D.

* * *

Practice of Medicine by Hospitals.—The internal revenue bulletin for August 26 reports some peculiar rulings on the practice of medicine by hospitals. A non-doctor anesthetist served two hospitals, one on a salary basis and the other on a fee basis. The Internal Revenue

Service held that services to the hospital are as an independent contractor rather than an employee, because working conditions are not those of the usual employer-employee relationship. Further, the ruling makes it implicit that the services rendered are not medical since the anesthetist is not a physician and therefore his earnings are regarded as the product of a trade rather than a profession for tax purposes. In another ruling, it was held that an anesthetist who works exclusively for one dental surgeon on a fulltime basis is an employee of that dentist, even though his sole remuneration consists of charges listed separately on the dentist's billings (WRNS).

* * *

Hospital Construction, Hill-Burton.—Up to July 31, 1957, the Hill-Burton program embraced 3,535 approved projects, with a total estimated cost of \$2,890,497,651, the federal share of which was \$908,689,102. These have added or will add more than 153,000 beds to the 898 health units. Two thirds of the projects are completed and in operation nearly 1,000 others are in various stages of construction (WRMS).

* * *

Clarence L. Candler Honored.—*The Detroit News* for Sunday, July 28, 1957, carried a picture of Dr. Clarence L. Candler, Detroit, and a story of his retirement from the practice of medicine in which he has been very active for many years, including service as a delegate to the Michigan State Medical Society and a visitor to the AMA meetings. Dr. Candler had practiced for more than forty years, had served as President of the Detroit

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board of Health, and had also been a police surgeon (at least he had a red flasher on top of his car to facilitate early arrival when calls came for help). The doctor hopes to devote more time to his private movies and "do-it-yourself."

* * *

Standing Orders for Nurses in a Mass Disaster.—The Detroit Department of Health, the Medical and Public Health Divisions of Civil Defense, and The Wayne County Medical Society have adopted a schedule of standing orders for use of nurses in mass disaster in the absence of a doctor, or before he arrives; also a formula of care for the victim patient. The Co-ordinating Committee of the Michigan State Medical Society has approved the same rules for use anywhere in the state. These rules have been revised as of February 1, 1957, and are published by the Detroit Department of Health. These rules are primarily for use when the nurse must act in the absence of a physician. Three headings are mentioned: (1) Immediate Treatment because of massive hemorrhage, asphyxia, chest wounds, abdominal wounds, burns, crash injuries, and head and spine injuries; (2) identification—an emergency medical tag; and (3) relief of pain, including a list of doses for numerous drugs. Formulae are given for various solutions and preparations needed. Detailed instructions for fracture splints are given briefly. Respiratory obstruction from whatever cause requires immediate relief. The list of standing orders occupies six single-spaced pages.

Loan Fund.—Early this year the Michigan Chapter of the American College of Surgeons established a loan fund for use of residents in surgical training who find themselves in financial difficulties. Applicants for the fund are given a careful screening, and the money is loaned free of interest, but with the understanding it will be repaid to the fund as soon as the recipient is established in practice. To date, three loans have been made. It is hoped the fund will be self-perpetuating. This is a very worthy cause, and the experience within a very few months of establishment proves the need. We congratulate the College.

* * *

J. M. Rawlings, M.D., of Flint, has been elected a member of the Royal Society of Health of London, England. The election was based on a paper delivered by Doctor Rawlings, in Rome, on "Bio-Chemical Changes of the Body Found in Pulmonary Tuberculosis."

* * *

A Fourth Bahamas Medical Conference will be held at Fort Mantagu Beach Hotel, Nassau, December 1-15, 1957. For information, write B. L. Frand, M.D., 1290 Pine Avenue West, Montreal, Canada.

* * *

The American Medical Association is concentrating its activities on the fall campaigns for funds to help our medical colleges. Committees are being formed, and

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information will be coming from Chicago early in the fall.

* * *

Steven J. Figiel, M.D., Leo S. Figiel, M.D., and D. K. Rush, M.D., presented a paper at the annual meeting of the American Medical Association in New York dealing with "A New Approach to the Colon Study—High Kilovoltage Spot Compression Technique."

* * *

Leo S. Figiel, M.D., and Steven J. Figiel, M.D., presented a paper and exhibit at the annual meeting of the Rocky Mountain Radiologic Society in Denver, Colorado, dealing with "Unusual Manifestations of Ileocecal Pathology Including the Appendix."

* * *

Medical Conferences.—The American Medical Association through its various Councils and activities is sponsoring several fall conferences of direct interest to the Medical Profession: *A National Conference of Physicians and Schools*, October 30 to November 2, 1957, at the Moraine-on-the-Lake hotel, Highland Park, Illinois, will feature "A Decade of Progress in Fitness" at its sixth session. It is sponsored by the AMA's Bureau of Health Education and will emphasize continuing interest in the health and all-around fitness of children and youth. More than eighty nationally recognized consultants have been scheduled from medicine, education and public health to lead the discussion groups.

Broadcasters and Doctors.—A two-day meeting is scheduled by the American Medical Association and the National Association of Radio and Television Broadcasters for November 7 and 8 at the Hotel Sheraton Blackstone in Chicago, for a conference on utilization of local radio and television time by medical and health organizations. Public interest programs involving medical subjects are appearing more and more frequently. Both broadcasters and physicians want to be sure that such programs are interesting, informative and factual. The fall conference will be open to radio and television broadcasters, representatives of medical societies, hospital organizations, voluntary health organizations, and other interested in public health programs.

Rural Health.—The AMA's second study conference on October 4-5, 1957, for chairmen and members of Rural Health committees, sponsored by the Council on Rural Health, was held at Purdue University, Lafayette, Indiana. The opening session was devoted to organizational techniques of statewide Rural Health Committees. Another session featured representatives of leading farm organizations outlining their problems.

SMJAB.—The State Medical Journal Advertising Bureau, formerly sponsored by the AMA, now an independent organization of editors and business managers (M.D.) of most of the state medical society journals, will hold its annual session in Chicago, October 28 and 29, 1957. These meetings date from 1910, at Chicago.



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267 W. Michigan Ave., Jackson, Michigan

"Study Abroad" will be the theme of the third world tour, postgraduate clinical course, sponsored by the International College of Surgeons. The professional trip, leaving San Francisco, October 20, will circle the globe for forty-eight days. The return to New York will be December 7, with optional return routings to permit stop-over privileges in many European cities. Luxury airlines will be used to cover a wide territory in a reasonably short time. Families and friends will be accommodated.

Fellows of the International College of Surgeons have arranged lectures, clinical demonstrations and entertainment in Hong Kong, the Philippines, Thailand, India, Turkey and Greece. Dr. Arnold Jackson of Madison, Wisconsin, past president of the United States Section, I.C.S., will be the co-ordinator. Detailed information may be obtained from the International Travel Service, Inc., Palmer House, Chicago.

* * *

Dr. M. Duane Sommerness, Medical Superintendent at the State Hospital at Traverse City, Michigan, announces the appointment of Dr. F. T. Sorum to the medical staff of that institution. Dr. Sorum received his medical degree from Rush Medical School of the University of Chicago, and since 1952 has been a member of the staff at Willmar State Hospital, Willmar, Minnesota. Dr. Sorum is a member of the South West Medical Society of Minnesota, a member of the State Medical Association, and the American Medical Association. Doctor and Mrs. Sorum with their two children, Solveg Ann and Ralph Edward, moved to Traverse City on September 1.

The Institute of Industrial Health at the College of Medicine of the University of Cincinnati announces a three-day Symposium on Fluorides to be presented December 9-11, 1957, inclusive. The purpose of this symposium will be to present the most recent information that is available concerning the physiological behavior of the absorption of fluoride.

The symposium will be open to physicians and dentists in industry and public health and to other professional persons who are interested in the subject. Attendance will be limited and early application is suggested. The registration fee will be \$50.

For further information and application blank, write to Secretary, Institute of Industrial Health, Kettering Laboratory, Eden and Bethesda Avenues, Cincinnati 19, Ohio.

* * *

The Michigan Proctological Society officers for the year are: Joseph W. Becker, M.D., Detroit, President; Donald J. Pearson, M.D., Battle Creek, President-Elect; Guy W. DeBoer, M.D., Grand Rapids, Secretary; Martin C. Sharp, M.D., Saginaw, Treasurer.

* * *

The Sister Elizabeth Kenny Foundation announces a continuance of its post-doctoral scholarships to promote work in the field of neuromuscular diseases. These scholarships are designed for scientists at or near the end of their fellowship training in either basic or clinical fields concerned with the broad problem of neuromuscular diseases.

Kenny Foundation Scholars will be appointed annually. Each grant provides a stipend of from \$5000 to \$7000 a year for a five-year period, depending upon the Scholar's qualifications. Candidates from medical schools in the United States and Canada are eligible.

Inquiries concerning details should be sent without delay to: Dr. E. J. Huenekens, Medical Director, Sister Elizabeth Kenny Foundation, 2400 Foshay Tower, Minneapolis 2, Minnesota.

* * *

Coccidioidomycosis, which was known up to a decade ago mainly to physicians and mycologists working in the endemic area, must now be seriously considered in the differential diagnosis of chronic pulmonary lesions in nonendemic areas. Because of the great numbers of military personnel who were stationed in endemic areas during and after World War II, a widespread scattering of the disease occurred, although the area itself apparently showed no signs of expanding.—DENIS J. O'LEARY, M.D., and FRANCIS J. CURRY, M.D., *American Review of Tuberculosis*, April, 1956.

* * *

Harold F. Diehl, M.D., Dean of the College of Medical Sciences, University of Minnesota, and long active in committee work of the American Medical Association, will assume his duties as Senior Vice President for Research and Medical Affairs and Deputy Executive Vice President of the American Cancer Society, on November 1, 1957.

Doctor Diehl is well known for his work with the

AMA Council on Civil Defense, having been a member since its creation by the 1947 House of Delegates, and Chairman since December, 1954.

Congratulations, Doctor Diehl!

* * *

William A. Hyland, M.D., of Grand Rapids, Chairman of the AMA House of Delegates Committee to study the Heller Report, has called a number of meetings in Chicago beginning with one at the AMA headquarters on August 8. Doctor Hyland has invited all who have read the Heller Report and who care to make suggestions, to write to him at 110 Fulton Street East, Grand Rapids, Michigan.

* * *

Osborne A. Brines, M.D., of Detroit, has been elected, for a three-year term, as President of the International Society of Clinical Pathology.

Congratulations, Doctor Brines!

* * *

"Standing Orders for Nurses in a Mass Disaster," as approved by the Wayne County Medical Society, and developed by the Detroit Department of Health (revised on February 1, 1957) were approved by The Council of the Michigan State Medical Society on July 12, 1957.

A copy of this informative brochure is available by writing the Medical and Public Health Division of Civil Defense, Detroit Department of Health, City-County Building, Detroit 26, Michigan.

(Continued on Page 1330)


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(Continued from Page 1328)

FIVE WAYS TO MAKE YOUR JOB GROW:

1. *Spend plenty of time on preliminary planning.* Planning is deciding what you want to do, when you want to do it and how you intend to do it. Time spent on planning will prove the most profitable time you spend on the job.

2. *Run your job, instead of letting your job run you, by handling details efficiently.* Don't let yourself be constantly burdened by an accumulation of unfinished jobs—things you intend to do “just as soon as you have a minute's spare time.” **Do the disagreeable jobs first—the others are easy.** No job is as hard to do as it looks—it's easy once you **START** it.

3. *Be persistent.* Persistence is a more potent factor in getting things done than mental brilliance.

4. *Don't ever stop learning.* Try to develop the inquisitive type of mentality. Human beings are capable of adding to their accumulated knowledge as long as they live.

5. *Don't waste time thinking up alibis.* Some wise man has said that there are two kinds of people: those who use alibis and those who get things done. Instead of alibis, which look to the past, spend your time on constructive planning for the future. (From—The Office).—*ASTA News Summary*, 1957.

* * *

The man who rows the boat generally doesn't have time to rock it.

—Anonymous

The **Third Annual Mercy Hospital Clinic Day** will be held October 17, 1957, at Mercy Hospital Auditorium, Port Huron. A buffet luncheon will be served at 1:30 p.m.

The program by members of the Medical Staff, Grace Hospital, Detroit, Michigan, will include the following:

“The Detection and Management of Cardiac Disease in Pregnancy”—**GEORGE S. FISHER, M.D., F.A.C.P.**

“The Rehabilitation and Employment of the Patient with Cardiac Disease”—**JOHN G. BIELAWSKI, M.D., F.A.C.P.**

“The Patient with Cardiac Disease As A Surgical Risk”—**DANIEL W. MYERS, M.D., F.A.C.P.**

Dinner will be served at St. Clair Inn, St. Clair, Michigan, at 7 P.M. The speaker will be **THE HONORABLE ROBERT J. MCINTOSH**, U. S. Representative 7th Congressional District.

* * *

The **Frank E. Bunts Educational Institute**, affiliated with the Cleveland Clinic Foundation, announces a post-graduate course in “Hematology” at the Institute Headquarters, 2020 East 93rd Street, Cleveland, Ohio, October 23-24, 1957. A symposium on Clinical Chemistry sponsored by the American Association of Clinical Chemists, Cleveland Section, will also be held at the Institute Headquarters, November 13-14-15. For information, write the director at the above address.

* * *

Michigan Blue Cross-Blue Shield were named winners of the top trophy for their 1956-57 Public Relations



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Program. The award was made at the annual Blue Cross-Blue Shield Public Relations Institute, held in Madison, Wisconsin, August 15. The Michigan BC-BS entry—one of fifty submitted by the eighty-six clans in the United States, was selected Grand Winner on the basis of its "Systematic Realization of Planned Objectives."

* * *

The Academy of Psychosomatic Medicine will hold its fourth annual meeting at the Morrison Hotel, Chicago, October 17-18-19. For program, write William S. Kroger, M.D., Chairman, 104 S. Michigan Avenue (Suite 415), Chicago 3, Illinois.

* * *

The Milwaukee Academy of Medicine announces a Symposium on Radioisotopes, to be held at Marquette University (Brooks Memorial Union), Saturday, December 7, 1957. For program and information, write Joseph F. Kuzma, M.D., 561 North Fifteenth Street, Milwaukee, Wisconsin.

* * *

Retirement point credits may be earned by reserve officers of the Military Medical Services attending sessions of the 64th annual convention of the Association of Military Surgeons of the United States to be held in Washington, D. C., October 28 to 30, 1957, the office of the Surgeon General has announced. This applies to eligible reserve officers of each component of the medical services of the army, navy and air force.

M.D. LOCATIONS

Through September 1, 1957

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Royal Hames, M.D.....Lansing
Robert Kamp, M.D.....Beulah
James P. Capo, M.D.....Sunshine Hosp., Grand Rapids

Assisted by Michigan Health Council

Morton J. Kripke, M.D.....Berkley
D. Bonta Hiscoe, M.D.....Lansing
James E. Kelly, M.D.....Flint
Robert Huebner, M.D.....Hastings
James G. Hopkins, M.D.....Muskegon
Clarence H. Schultz, M.D.....Dearborn
John O. L. Jui, M.D.....Grand Rapids
Alfred Touma, M.D.....Royal Oak
Victor Glikman, M.D.....Pontiac
David Schane, M.D.....Detroit
John L. London, M.D.....Lakeview
Ralph Woodbury, M.D.....Gross Pointe

MEDICAL TELEVISION SHOWS

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August 4—Alcoholism—(Film—"Alcoholism the Revolving Door")

August 11—M.D. Qualities—(Film—"Even for One")

August 18—Mental Health—(Film—"Roots of Happiness")

August 25—Rehabilitation—(Film—"Man in the Window")

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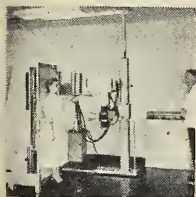
J. N. Griffith

M. V. Scudder

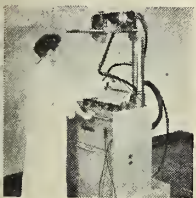
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21406 Fenkell Ave., Detroit 23, Michigan

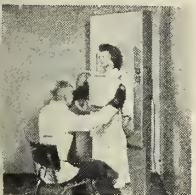
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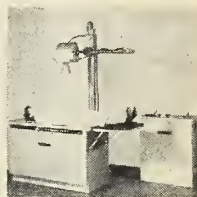
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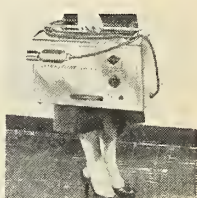
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Communication

Dear Dr. Haughey:

Congratulations on the new cover design—"Michigan" is now visible from a distance of well over my presently receding presbyopic minimum. I like it fine.

I also liked the meaty section on medical care plans, and I wonder if a dozen copies or so might be obtained for our use here. Are over-run pages or tear sheets available?

I'm just home one day from a 9,000-mile cross-country tour with Mrs. Arnold and our fourteen-year-old son—it took us eight weeks, ever since the AMA meeting. We settled for a week between Mullet Lake and Mackinac, and again on a dude ranch in Jackson Hole, but the rest of the time we were on the move pretty steadily. Nothing like a road map to warn you that bifocals are just around the corner!

I hope to see you in Chicago in October, if I can get away.

Cordially yours,

HARRY L. ARNOLD, JR.

Honolulu 14, Hawaii
(formerly, Owosso, Michigan)
July 30, 1957

Dear Doctor Haughey:

The JOURNAL OF THE MICHIGAN STATE MEDICAL SOCIETY, Vol. 56, No. 7, for July, 1957, contains an editorial captioned, What Is A Hospital? over the name of Dr. Clarence I. Owen. This has been drawn to my attention because of the deep interests of the staff of one of our research projects in arriving at such a definition. The first article on this subject has been published in *Hospitals*, the journal of the American Hospital Association, under the title "Sense or Jabberwocky?" This first article appeared in issue No. 12 of Vol. 31, published under date of June 16, 1957. We anticipate that the first set of definitions, including those for hospitals in certain broad categories, will be published in the near future.

I should like to make it clear that our definitions are the product of research activity conducted under the sponsorship of the American Hospital Association, but otherwise independent of Association direction or policy. The Association may later choose to adopt definitions we have arrived at if they stand the test of scrutiny to which they are sure to be subjected. The research program is carried on under grant from the Bureau of Medical Services of the U. S. Public Health Service through its National Advisory Hospital Council. The definitions work is one phase of a total project devoted to determination of "The Future Needs for Hospital Facilities."

I would like to express sympathetic understanding of Doctor Owen's viewpoint as expressed in this editorial. Teamwork of a high order between those who bear responsibility for the administrative and professional activities within hospitals is essential in this as in all other operations of mutual concern. We look forward to considerate reflection on our labors by the medical profession in all its component parts when our definitions are published. Dr. Owen may wish to watch for this output of our staff.

Sincerely yours,
ALAN E. TRELOAR, Ph.D.
Director of Research

Chicago, Illinois
August 22, 1957

To The Editor
Dear Sir:

Upon reading my good friend Foster's contribution to the symposium on Michigan Medical Service, in the June issue of the JOURNAL, I am compelled to contribute a few items to the historical account. I agree that the younger members of the profession should be informed about its birth. It is a legitimate one.

My interest is also legitimate, due to the fact that I am one of the two living members of the original committee that started the whole thing. The other is Dr. J. C. Christian of Lansing.

The committee in question, as you will remember, was known as The Marshall Committee. It was appointed by the then President, Dr. Carl Moll of Flint, and consisted of Dr. William Marshall, Flint, Chairman; Dr. Frederick A. Baker, Pontiac; Dr. L. G. Christian, Lansing; Dr. B. U. Estabrook, Detroit; Dr. C. S. Gorsline, Battle Creek. Dr. F. C. Warnshuis, then secretary of the State Society, acted as an *ex officio* member.

We presented the first insurance plan, mutual health service, back in 1933, when the phrase, health insurance, was a dirty word. Those were the days of the great depression, days of fear. Federal government was upturning our old concepts. The social revolution was on. Compulsory health insurance was being widely urged by powerful lay groups.

We were ahead of the times with our proposal. The profession, not only in Michigan, was afraid of insurance medicine. The AMA strenuously opposed it. Our House of Delegates refused to accept even the principle of insurance.

Today, all this sounds funny. I can assure you that it was not funny then!

I would add this. There is much to be done. I trust that those in charge continue to have the vision and

courage necessary for making Michigan Medical Service better. To quote Sir Arthur Salter, "It is our system in which we have grown up that we must reform—and in part transform."

Most sincerely yours,
FREDERICK A. BAKER

Pontiac, Michigan
August 12, 1957

Dear Mr. Burns:

Previously, we have written to you and asked your co-operation on this same subject. We appreciate your consideration and thank you sincerely for your past help.

The following paragraph is from our contract, V1005 M76, with the Veterans Administration:

"USP and NF PRODUCTS—The Contractor, without cost to the Veterans Administration, will from time to time, and by appropriate means, advise the Michigan State Medical and Dental Societies of the availability of USP and NF Products in an effort to establish prescribing practice which will permit the dispensing of the highest quality drugs for beneficiaries of the Veterans Administration at the lowest possible cost to the Veterans Administration."

Following the details of this paragraph, we submit for your review and counsel, the enclosed items. When time and space permits, would you pass this information on to your members.

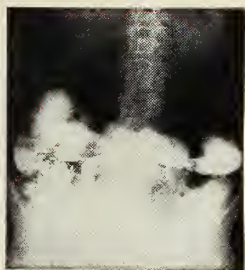
Each licensed pharmacy in Michigan has in his extensive library, an up-to-date copy of the United States Pharmacopeia and National Formulary.

These publications are available to the members of the Medical and Dental Societies either for use in the store or for reference work in the office.

Sending my best personal regards and again, our ap-

when anxiety and tension "erupts" in the G. I. tract...

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JOHN H. BUTTS
Executive Secretary

*Lansing, Michigan
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- One usual metric dose contains about 320 mg. each of Ammonium
Bromide, Potassium Bromide, and Sodium Bromide.
- Compound Resorcinol Ointment, National Formulary
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- Zinc Oxide Paste with Salicylic Acid, National Formulary
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- Compound White Pine Syrup with Codeine, National Formulary
Category—Antitussive.
- Usual Dose—4 ml. (approximately 1 fluidram).
- One usual metric dose contains 8 mg. of Codeine Phosphate.
- Thymol Iodide, National Formulary
Category—Antifungal; anti-infective.
- Thimerosal Ointment, National Formulary
Category—Antibacterial.
- Ichthammol Ointment, National Formulary
Category—Local antibacterial; irritant.
- Ascorbic Acid Tablets, The Pharmacopeia of the United States
(The United States Pharmacopeia) 15th Revision
Category—Antiscorbutic vitamin.
- Dose—Daily, oral and subcutaneous.
- Usual—Requirement, 75 mg.
- Therapeutic, 150 mg.
- Range—Requirement, 25 to 75 mg.
- Therapeutic, 100 mg. to 1 Gm.
- Cortisone Acetate Tablets, The Pharmacopeia of the United States
(The United States Pharmacopeia) 15th Revision
Category—Adrenocortical hormone.
- Dose—Usual—Oral, 25 mg. four times a day.
- Intramuscular, 100 mg. daily.
- Range—Oral, 2.5 to 75 mg.
- Intramuscular, 5 to 300 mg.
- Phenobarbital Elixir, The Pharmacopeia of the United States (The
United States Pharmacopeia) 15th Revision
Category—Central depressant.
- Dose—Usual—5 ml. (20 mg. of phenobarbital) four times a day.
- Range—5 to 15 ml.
- Atropine Sulfate Tablets, The Pharmacopeia of the United States
(The United States Pharmacopeia) 15th Revision
Category—Parasympatholytic.
- Dose—Usual—0.5; topically as 1 to 2 per cent solution.
- Range—0.3 to 1.2 mg.
- Belladonna Tincture, The Pharmacopeia of the United States (The
United States Pharmacopeia) 15th Revision
Category—Parasympatholytic.
- Dose—Usual—0.6 ml. three times a day.
- Range—0.3 to 2.4 ml.
- Clove Oil, The Pharmacopeia of the United States (The United
States Pharmacopeia) 15th Revision
Category—Dental obtundant; pharmacologic necessity for Diphen-
hydramine Hydrochloride Elixir.
- For External Use—Topically as required.
- Isoniazid Tablets, The Pharmacopeia of the United States (The
United States Pharmacopeia) 15th Revision
Category—Tuberculostatic antibacterial.
- Dose—Usual—100 mg. twice a day.
- Range—50 to 200 mg.

Achievements after Sixty.—When you look at the
facts, a man's best days are not over at sixty. There
are figures to show that the greatest achievements of
man were consummated between his sixtieth and sev-
entieth year.

Examining the histories of some 400 career men, the
most notable and outstanding statesmen, painters, war-
riors, poets and writers of their times, indicates the
decade of years between sixty and seventy contained
35 per cent of the world's greatest achievements; be-
tween seventy and eighty years, 23 per cent; after eighty
years, 8 per cent. In other words, 66 per cent of all
great achievements accomplished by man were devel-
oped and given posterity after he had reached or passed
his sixtieth year.—*Midland Rotary Table.*

THE DOCTOR'S LIBRARY

Acknowledgments of all books received will be made in this column, and this will be deemed by us as full compensation to those sending them. A selection will be made for review, as expedient.

CHRONIC ILLNESS IN THE UNITED STATES.

Volume I. Prevention of Chronic Illness. Commission on Chronic Illness. Published for the Commonwealth Fund. Cambridge, Massachusetts: Harvard University Press, 1957.

The Commission on Chronic Illness is publishing four volumes on Chronic Illness. This is the first, and is the result of seven years' study and investigation by the voluntary commission composed of representatives of many national societies—Cancer, Heart, Dental, Hospital, Medical, Psychiatric, Public Health, Public Welfare, Rheumatism, Muscular Dystrophy, Polio, Multiple Sclerosis, Tuberculosis, Crippled Children, and Health Insurance, or various Foundations.

During the years, many reports have been issued, but no work is now being summarized in four very presentable volumes from the Harvard University Press.

The introductory part is explanatory. The first section of the book is devoted to the problems of Prevention, Promotion of Health, Primary Studies, Periodic Health Examinations, Screening, Education and Planning. Chapters are devoted to the list of chronic diseases, repre-

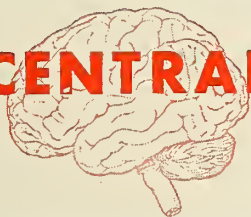
sented largely by the national societies associated in the commission—Arthritis and Rheumatism, Blindness, Cancer, Cardiovascular Disease, Cerebral Palsy, Diabetes, Epilepsy, Deafness, Mental Health, Multiple Sclerosis, Poliomyelitis, Late Syphilis, Tuberculosis, Chronic Industrial Disease, Dental Health, Emotional Factors, Heredity, Malnutrition and Obesity. These chapters are very well written, giving valuable information and procedures found to be applicable.

The final part of the book is devoted to appendices on History of the Commission, By-Laws, list of publications. Appendix E lists the largely controllable chronic diseases, the partially controllable, and the uncontrollable ones.

WILLIAM HARVEY. His Life and Times: His Discoveries: His Methods. By Louis Chauvois. Foreword by Sir Zachary Cope. New York: Philosophical Library, 1957. Price, \$7.50.

This is a very well-written and well-translated biography of one of the giants in the medical world, prepared for the tercentennial of his death, which occurred June 3, 1657. The treatment is unusual. A day in Dr. Harvey's life is given in detail, and the day selected was when he was forty-nine years of age, just before publishing his theory of the circulation of the blood. The concept had been announced and used by him and some of his friends for ten years, but had not been published publically. The story is given of his being summoned to the bedside of King Charles I, who was very ill with

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pneumonia. Description is made of treatment and use of leeches by the doctor himself.

Chapters are given to the early days of study and services in hospitals, his war service, and his later years when he had become famous and wealthy—at least he had constructed a building at the medical school to contain his office and teaching facilities. The doctor's death scene is given, his will and the disposition of his effects, including the withholding from one heir of his coffee pot, which went to his younger brother, his executor. About a third of the book is devoted to an appreciation of Dr. Harvey's life and work, of which the discovery of the circulation of the blood was the most outstanding of all medical history. His work as a renowned surgeon, anatomist and medical writer are well presented. He made many of his own illustrations. We are happy to add this volume to an increasing list of biographies of medical greats.

SURGEONS ALL. By Harvey Graham, M.D. Foreward by Oliver St. John Gogarty. New York: Philosophical Library. Price \$10.00.

This book gives a rather comprehensive study of the history of surgery. In covering the development of the art through the ages, the book travels about, relating interesting and historical deeds. The book is well written and the narrative style keeps one's interest at a high level. This book is proof that the history of medicine provides extremely interesting reading.

R.L.M.

AN ATLAS OF THE COMMONER SKIN DISEASES

With 153 Plates reproduced by direct color photography from the living subject. By Henry C. G. Semon M.A., D.M. Oxon., F.R.C.P. London; Consulting Physician for Diseases of the Skin, and former Lecturer to Postgraduates, Royal Northern Hospital; Consulting Dermatologist, Hampstead and North-West London General Hospital; Ex-president and Vice President, Dermatological Section, Royal Society of Medicine; Corresponding Member of the Société Française de Dermatologie at Syphilologie; Médaille d'Honneur de l'Assistance Publique, République Française; Medical Referee for Industrial Dermatitis Ministry of National Insurance. Revised with the collaboration of Harold T. H. Wilson, M.A., M.D. Cantab., M.R.C.P., D.T.M., Dermatologist and Lecturer to Postgraduates, Royal Northern and Central Middlesex Hospitals; Dermatologist, Mount Vernon Hospital, Northwood, Wimbledon, and Highlands Hospitals. Color photography originally directed by the late Arnold Moritz, B.A., M.B., B.C. Cantab. Fifth edition. Baltimore: The Williams and Wilkins Company, 1957. Price, \$20.00.

This book contains a full-page color photograph along with a brief discussion of 131 of the commoner skin diseases and twenty-two more of the less common skin diseases. For the most part, the photographs represent well the topic under discussion, and the color reproduction is excellent. The authors live in Great Britain but their text is very close to that of American authors. For a general physician who wants a quick reference along with good color pictures to aid him in his dermatological problems, this is an excellent atlas.

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FOOT TROUBLES. By T. T. Etamm, F.R.C.S. New York: Philosophical Library, Inc., 1957. Price, \$4.75.

This book of 122 pages was printed in England on white non-gloss paper with large easily readable type, hand size and completely acceptable. The text is divided into ten chapters dealing with the foot and its mechanics, its diseases of improper function, deformities and their correction, infections, injuries, pain and effects of chronic diseases. The care of the foot in health, and certain diseases as diabetes which possess certain special liabilities. Care of children's feet and footwear are given proper attention, and the problem of selection of shoes is studied. There are illustrations and diagrams. The book is very readable and will be of great assistance in many lines.

CIBA FOUNDATION COLLOQUIA ON AGEING. Volume 3. Methodology of the Study of Ageing. Editors for the Ciba Foundation, G. E. W. Wolstenholme, O.B.E., M.A., M.B., B.Ch., and Cecilia M. O'Connor, BSc. 47 illus. Boston: Little, Brown and Company, 1957. Price, \$6.50.

The Ciba Foundation is continuing its plan of conferences on various medical subjects. The Foundation invites to London, England, leaders in kindred subjects who attend, present their reports of papers, and enter into discussions. The material is then edited and published in book form. This number is the third volume in The Colloquia on Ageing: Methodology of the Study. Twenty-eight scientists from the entire world assembled

and took part; five from the United States and three from Canada, with Charles H. Best, M.D., of Toronto, acting as chairman. The thirteen papers were presented with their discussions, a very creditable array of talent. This book is just as interesting as its predecessors.

DERMATOLOGIC FORMULARY. From the New York Skin and Cancer Unit, Service of Dermatology (Dr. Marion B. Sulzberger, Director). Frances Pascher, M.D., Editor. Revised, 1957. New York: A Hoeber-Harper Book, 1957.

This is a most complete dermatologic formulary listing a multitude of preparations with a brief discussion of the items together with their uses, indications and contraindications. It is right up to date with listings of drugs which have been on the market only a few months. This is an excellent booklet and highly recommended for the general physician or beginning dermatologist.

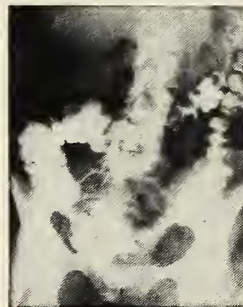
H.A.

THE POWER OF SELF-KNOWLEDGE. Body and Mind Awareness; A New Technique For Successful Living. By Milton W. White, M.D. A dynamic, practical learning-method to help you understand and control your own emotions, thinking, and behavior in order to achieve maximum health, happiness, and self-acceptance. New York: The Julian Press, Inc., 1957. Price \$3.95.

This book, written by one of our members in Detroit, is primarily designed for use of patients with psychosomatic problems. General semantics are called upon to

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outline self-knowledge, case histories being cited as a help. The second part, "How to protect yourself from the fear based emotions," is philosophical and covers nervousness, hostility, frustration, guilt, shame, and remorse. Proper and suggested co-ordination and willingness can wipe out such emotions and their self-stimulated disease conditions. The third section of the book is divided into five sections, showing how self-knowledge can give a life of health, happiness and self-satisfaction. This is especially a book for the patient whose troubles may be mostly self-induced.

THE SURGICAL MANAGEMENT OF PULMONARY TUBERCULOSIS. Edited by John D. Steele, M.D.

Introduction by Frederick A. Collier, M.D. Biographical Sketch of John Alexander by Cameron Haight, M.D. Springfield, Illinois: Charles C Thomas. Price \$9.50.

In this first volume of a planned John Alexander Monograph Series, fourteen thoracic surgeons trained by Dr. Alexander have collaborated to produce a fine résumé of the current surgical treatment of all phases of pulmonary tuberculosis. The final chapter on the chemotherapy of tuberculosis, was written by his medical colleague, John B. Barnwell. John Steele has reviewed the evolution of the surgery of pulmonary tuberculosis, summed up the modern thoracoplasty technique, and has commented on changes in this field since the 1925 and 1937 textbooks published by Dr. Alexander (who was working on a revised edition of "The Collapse Therapy of Pulmonary Tuberculosis" at the time of his death in 1954).

Pulmonary resection for tuberculosis with pneumonectomy and segmental resection is discussed with slightly varying viewpoints by several surgeons. Other authors (in separate chapters) cover combined collapse and resection therapy, thoracoplasty, extrapariosteal plombage, treatment of pleural tuberculosis, decortication, cavernostomy and the surgical management of pulmonary tuberculosis in psychotic patients. These discussions are nicely illustrated with x-rays and anatomical drawings. This book is very well done and will be an excellent reference textbook for physicians and surgeons in this field.

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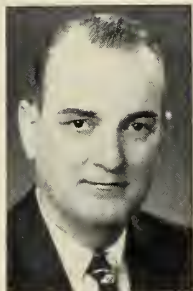
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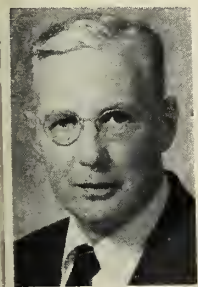
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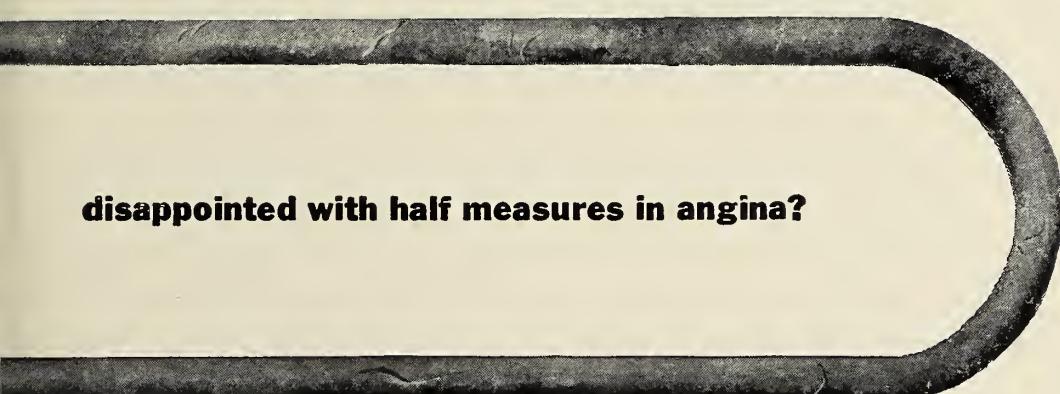
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You and Your Business

RECOMMENDATIONS AND BACKGROUND OF INFLUENZA—1957

Adopted by the Michigan Department of Health, September 9, 1957.

Approved by the MSMS Committee on National Defense, September 18, 1957.

Approved by the MSMS Council, September 27, 1957.

Strains of a new family of Type A influenza viruses have caused extensive outbreaks of a mild type of influenza throughout the world. There is a possibility of an outbreak of this disease this fall or early winter involving ten to twenty per cent of Michigan people during a period of from four to six weeks. A vaccine has been developed for use against the new influenza family.

Recommendations for the Guidance of Physicians and Health Officers

Use of Vaccine.—The new influenza vaccine should be used as rapidly as it becomes available. To be effective, it must be given at least 10-14 days before exposure. There are no immunological dangers in giving the new influenza vaccine concurrently with other immunizing agents. But the vaccine should not be given concurrently in those instances where the other immunizing agents are likely to cause reactions.

Priorities.—With an anticipated shortage of vaccine and the possibility of a high attack rate, four groups, in the following order, should be given priority for immunization:

(a) Those whose services are necessary for the health of the community;

(b) Those who provide other basic community services;

(c) Those who in the opinion of their private physicians constitute a special medical risk;

(d) Those who are housed together in concentrated groups.

Dosage.—Vaccine dosage should be as follows:

3 months—5 years—Two doses of 1/10 cc. intradermally given one to two weeks apart

6 years—12 years—Two doses of 1/2 cc. subcutaneously given two weeks apart

13 years and over—One dose of one cc subcutaneously

Diagnosis.—With clinical diagnosis based on the judgment of the individual physician, the following points and procedures should be observed:

(a) A reasonable number of laboratory specimens from any outbreak should be submitted for viral studies to establish the specific etiology. Specimens for viral studies from an outbreak will be accepted by the state health department only upon recommendation of the local health officer and only within the capacity of the laboratory.

Twelve specimens should be sufficient for the community purpose involved. Laboratory viral studies are not of practical value in managing individual cases since the overwhelming majority of patients recover before such studies are completed.

(b) Bacteriological studies should be made of patients when there is suspicion of bacterial complications.

Home Care.—The vast majority of influenza patients should be treated at home. Hospital care should be considered only for complicated cases and for others who in the opinion of their physician constitute a special medical risk.

Community Action.—For the present, at least the risk of the new type of influenza is not sufficient to justify either delaying the opening of schools, the closing of schools once opened or interfering with public gatherings.

Public Understanding.—Local health departments are designated as sources for information about influenza, and the state health department will request physicians' organizations to make specific recommendations to their membership at patients concerning the management of influenza cases.

Surveillance.—The following procedures will be observed in the surveillance of the disease in Michigan:

(a) All clinically-diagnosed cases of influenza like disease will be reported.

(b) Local health officers will supplement their regular reporting from physicians carried out under the law by (1) spot-checking by telephone with local physicians (or representative sampling as to the number of patients with influenza seen by them during the past week; (2) spot-checking by telephone with representative schools and industries regarding excessive absenteeism.

(c) The State Health Department will require no data from local health departments other than the number of diagnosed cases.

(d) Each week, the State Health Department will spot-check a sample of the hospitals in the state as to the number of cases of and deaths from pneumonia.

Background

About the Vaccine.

Distribution.—In an effort to secure equitable distribution of the vaccine within the state, manufacturers of the vaccine have been requested to allot Michigan's share of their production of new vaccine to their "detail men" in proportion to the population served by them.

(Continued on Page 1364)

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RECOMMENDATIONS AND BACKGROUND OF INFLUENZA—1957

(Continued from Page 1362)

Potency and Dosage.—The strength of the monovalent vaccine now being produced is 200 CCA units per 1 cc. dose. Recommendations are based upon providing the widest possible use of a vaccine which can be made available commercially in the shortest period of time. As the vaccine supply becomes more plentiful, it is expected that either the potency of the vaccine or the dosage will be increased, and that the vaccine may be modified to protect against other influenza viruses.

Reactions.—Use of the new vaccine is expected to cause some soreness at the site of injection and about the same percentage of other reactions as are caused by the polyvalent forms of vaccine which have been available commercially over a number of years. Reactions are most frequent in younger children, while less than one per cent of adults immunized are expected to have more than local tenderness.

About the Disease

Characteristics.—The newer form of influenza resembles the clinical picture of mild influenza occurring during the past ten years. It in no way resembles the influenza experienced in 1918. Even in countries with considerable poverty and congested, overcrowded populations, deaths from complications of influenza have not exceeded one per two thousand cases.

The development of influenza in a given individual is thought to be dependent upon the relative dose of the virus received and the patient's antibody levels and general health.

The virulence of influenza viruses has not been observed to change during any outbreaks in the twenty-four years that they have been identified. There is no reason to believe that the situation will be any different this year.

Outbreaks.—In Australia, where this type of influenza has been occurring this spring and summer (their winter months), the disease has continued to be relatively mild. There were few bacterial complications and there was no serious disruption of community living. The attack rate in Australia was about 15 per cent of the population in those areas where the disease assumed epidemic proportion. This incidence occurred in a four to six weeks period.

Observation of influenza outbreaks in other parts of the world has again proven that the maintenance of good nutrition and good health habits are effective in preventing complications.

HIGHLIGHTS OF SEPTEMBER SESSION OF THE COUNCIL

September 22-27, 1957

A total of ninety-three items was presented and discussed by the twenty-five members of The Council (eighteen Councilors, The President, President-Elect, Immediate Past President, Secretary, Treasurer, Speaker and Vice Speaker) at the two meetings held coincident with the MSMS Annual Session in Grand Rapids.

Three hundred thirty-one cumulative hours were contributed on these two days by the members of The Council in their study of and decision on the problems facing the medical profession in Michigan, including:

● Reorganization of The Council:

D. Bruce Wiley, M.D., Utica, was re-elected Chairman.

W. B. Harm, M.D., Detroit, was again chosen as Vice Chairman.

Wm. M. LeFevre, M.D., Muskegon, was selected as Chairman of the County Society's Committee to succeed himself.

Ralph W. Shook, M.D., Kalamazoo, was elected head of the Finance Committee.

B. M. Harris, M.D., Ypsilanti, was elected the post of Chairman of the Publication Committee.

● The Monthly financial reports were studied and approved, as well as bills payable which were ordered paid.

● The Market Opinion Survey Report was presented, in its entirety, and referred to the House of Delegates. A vote of thanks was extended Survey Director H. W. Brenneman and MSMS headquarters staff, for services beyond the line of duty to complete this monumental task in four and one-half months. The Survey Report, including action taken on same by 1957 House of Delegates, was ordered transmitted to Michigan Medical Service.

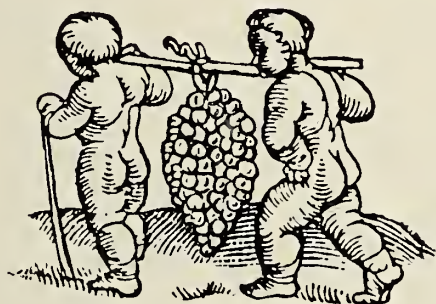
● Group Life Insurance for MSMS Members Report on a survey made by a leading insurance consultant indicated a high percentage of MS members are interested in this coverage; favorable consideration was recommended to House of Delegates.

● The Annual Report of the Healing Arts Study Committee was approved and referred to House of Delegates as a part of the Supplemental Report of The Council.

● An instance of the practice of medicine by corporation was thoroughly discussed by Council; the Chairman was authorized to point a committee for Liaison with hospital administration, The Council hoping for better results through mutual understanding rather than from litigation.

(Continued on Page 1366)

why wine in digestive disorders?



Although the effects of wine on the digestive system have been discussed for centuries, it has been only in recent years that many of its physiological attributes have been determined.

WINE AND THE SALIVARY GLANDS—The increase in salivary flow following a moderate intake of wine is apparent almost immediately,¹ such increase being attributed to direct sensitization of secretory nerve endings.²

WINE AND GASTRIC SECRETION—With a pH averaging 3.2, wine resembles gastric juice more closely than does any other natural beverage. Its tannins, organic acids and salts of these acids serve as buffering agents to maintain this pH. Relatively low in content of alcohol, table wine has been found to stimulate gastric secretion and induce production of gastric juice high in hydrochloric acid, sodium chloride, rennin and pepsin.³

WINE AND THE DIGESTIVE TRACT—With its low concentration of alcohol, wine in moderate consumption has been found to induce a marked increase in biliary flow.⁴ This, together with increased function of pancreatic enzymes, may thus encourage better digestion of fatty foods.

THEREFORE—IN THE TREATMENT OF DIGESTIVE DISORDERS—Wine is being widely recommended in the treatment of anorexia, hypoehlorhydria without gastritis, mucous colitis, spastic constipation and diarrhea, and in digestive disorders stemming from emotional tension and anxiety.

These and other modern *R* uses for wine are discussed in the brochure "Uses of Wine in Medical Practice." For your free copy write—Wine Advisory Board, 717 Market Street, San Francisco 3, California.

1. Winsor, A. L. and Strongin, E. I.: *J. Exper. Psychol.* 16:589 (1933).
2. Beazell, J. M., and Ivy, A. C.: *Quart. J. Studies on Alc.* 1:45 (1940).
3. Faray, G., and Weissenboch, R. J.: *Hôpital* 25:306 (1937).
4. Okada, S.: *J. Physiol.* 49:457 (1915).

HIGHLIGHTS OF THE COUNCIL

(Continued from Page 1364)

- **The fee-schedule of the Michigan Society of Internal Medicine** was received for reference to any committee studying fees.
- **Appointments.** Wilfrid Haughey, M.D., was authorized to attend meeting of the Committee

Umphrey, M.D., Detroit, and Lester P. Dodd, Detroit.

- **C. E. Umphrey, M.D., Detroit, Michigan.** Chairman for the American Medical Education Foundation presented his final report, and recommendations for the future—during which he praised the Woman's Auxiliary for its tremendous job in furthering AMEF in this State.
- **The Beaumont Memorial Foundation,** as a



MEMBERS OF THE COUNCIL, 1957-1958

Seated (left to right): L. Fernald Foster, M.D., Detroit; G. W. Slagle, M.D., Battle Creek; D. Bruce Wiley, M.D., Utica; G. B. Saltonstall, M.D., Charlevoix; and W. A. Hyland, M.D., Grand Rapids.

Middle row (left to right): H. H. Hiscock, M.D., Flint; J. J. Lightbody, M.D., Detroit; Ralph W. Shook, M.D., Kalamazoo; K. H. Johnson, M.D., Lansing; W. M. LeFevre, M.D., Muskegon; Editor Wilfrid Haughey, M.D., Battle Creek; E. S. Oldham, M.D., Breckenridge; William Bromme, M.D., Detroit; and B. M. Harris, M.D., Ypsilanti.

Top row (left to right): O. J. Johnson, M.D., Bay City; G. Thomas McKean, M.D., Detroit; D. G. Pike, M.D., Traverse City; O. B. McGillicuddy, M.D., Lansing; Arch Walls, M.D., Detroit; J. F. Beer, M.D., St. Clair; C. Allen Payne, M.D., Grand Rapids; H. J. Meier, M.D., Coldwater; and T. P. Wickliffe, M.D., Calumet.

Absent on Society business: W. B. Harm, M.D., Detroit; B. T. Montgomery, M.D., Sault Ste. Marie; and A. E. Schiller, M.D., Detroit.

on Indigent Care of the AMA Council on Medical Service, Chicago; Legal Counsel Dodd was authorized to represent MSMS at workman's compensation section of the State Bar of Michigan convention, Detroit.

- **MSMS co-sponsorship** of 1958 Michigan Rural Health Conference, Ann Arbor, January 22-24, 1958, was authorized.
- **Report and statistics** on the MSMS Health and Accident Insurance program, provided by the carrier (Provident Life and Accident Insurance Company, of Chattanooga) were presented and given study—and included in the Supplemental Report of The Council.
- **Committee to Review the Problem of Professional Liability** was appointed by Chairman D. Bruce Wiley, M.D., as follows: S. W. Donaldson, M.D., Ann Arbor, Chairman, C. E.

thorized by the 1956 House of Delegates, created coincident with the 1957 MSMS convention—on September 25, 1957, with the following acting as incorporators and members of its Board of Trustees: Otto O. Beck, M.D.; W. S. Jones, M.D.; C. T. Eklund, M.D.; J. Fyvie, M.D.; L. J. Hirschman, M.D.; W. M. LeFevre, M.D.; A. H. Whittaker, M.D.; G. B. Saltonstall, M.D.; D. Bruce Wiley, M.D. Elected officers were: President, Otto O. Beck, M.D.; Vice President, W. M. LeFevre, M.D.; Secretary-Treasurer, Wm. J. Burns, LL.B. Life membership is \$100.00, and sustaining members \$5.00 per year. Doctor LeFevre became the paid sustaining member.

- **The Koppasch Case.** Legal Counsel Dodd reported that the Michigan State Medical Society

(Continued on Page 1368)

for certain disorders of menstruation and pregnancy

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oral progestogen
with
unexcelled potency
and
unsurpassed efficacy

Now, with small oral doses of this new and distinctive progestogen, you can produce the clinical effects of injected progesterone. In amenorrheic women for example, "As little as 50 mg. of [NORLUTIN] administered in divided doses over a five-day period was sufficient to induce withdrawal bleeding."¹

CASE SUMMARY²

Amenorrhea of 4 years' duration in a 24-year-old married woman. A course of 10 mg. NORLUTIN twice daily for 5 days was followed after 3 days by menses lasting about 5 days. Since no spontaneous menstruation occurred during the following 35 days, she was given another course of treatment with NORLUTIN, 10 mg. twice daily for 5 days. This was followed by menses.

When this patient was given ethisterone, 40 mg. twice daily for 5 days, no bleeding had ensued when she was seen 41 days later.

INDICATIONS FOR NORLUTIN: conditions involving deficiency of progestogen such as primary and secondary amenorrhea, menstrual irregularity, functional uterine bleeding, endocrine infertility, habitual abortion, threatened abortion, premenstrual tension, and dysmenorrhea.

PACKAGING: 5-mg. scored tablets (C. T. No. 882), bottles of 30.

REFERENCES: (1) Greenblatt, R. B.: *J. Clin. Endocrinol.* 16:869, 1956. (2) Hertz, R.; Waite, J. H., & Thomas, L. B.: *Proc. Soc. Exptl. Biol. & Med.* 91:418, 1956.



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HIGHLIGHTS OF THE COUNCIL

(Continued from Page 1366)

had been stipulated out of the Kopprasch case from any damage; only the conspiracy charges against the county medical society and the hospital remain. Trial is set in Allegan for October 8-9-10.

- **"Big Look."** Chairman W. S. Jones reported that the Big Look Committee had inspected property in Lansing as site for the future MSMS headquarters, but desired additional time for further investigation. The Council instructed the Big Look Committee to seek the services of an architect at the earliest possible date.
- **Committee Reports.** Rheumatic Fever Control Committee, meeting of September 11; Permanent Conference Committee, September 11; Committee on Michigan Medical Service, September 11 (the report of this committee as amended was referred to the 1957 House of Delegates); Committee on National Defense, September 18.
- **Supplemental Report of The Council** was given minute study, amended in several paragraphs, approved and referred to the House of Delegates.
- **Newly elected Councilors** were introduced at the Friday morning (September 27) meeting; 7th District, J. F. Beer, M.D., St. Clair; 8th District, E. S. Oldham, M.D., Breckenridge; 9th District, D. G. Pike, M.D., Traverse City; 10th District, O. J. Johnson, M.D., Bay City.
- **Matters of mutual interest** were discussed with A. E. Heustis, M.D., Michigan Health Commissioner.
- **Official thanks** to all who helped with the 1957 Annual Session were placed on The Council's minutes; a special vote of thanks was issued to Past President Jones and to retiring councilors L. C. Harvie, M.D., Saginaw; W. S. Stinson, M.D., Bay City; and H. B. Zemmer, M.D., Lapeer.
- **Individual reports** on the condition of the profession in each Councilor District were given by the Councilors.

MSMS MARKET OPINION SURVEY

The Opinion Survey of Prepaid Medical Care Coverage in Michigan, prepared by the Michigan State Medical Society and presented to its House of Delegates in Grand Rapids on September 23-24, attracted wide attention throughout the United States—even the *New York Times* devoting a column to the report.

The final report of this survey and the action taken on it by the 1957 House of Delegates are included in this number of *THE JOURNAL*.

"YESTERDAY'S HOPELESS"



DR. BRUSH

Brock E. Brush, M.D., Detroit, Chairman of the Program Committee for the 1958 Michigan Clinical Institute, announced that some thirty-five eminent clinicians and teachers will be guest essayists on a program aimed at presenting practical solutions in everyday clinical medicine.

"The MCI program next year will stress modern diagnosis and treatment of practical value in everyday practice" stated Dr. Brush. "The whole meeting will present new procedures, drugs and instruments which will help doctors of medicine transform yesterday's hopeless—the critically sick and chronically ill—into healthy, productive and independent individuals."

Some of the speakers at the MCI, scheduled for the Sheraton-Cadillac Hotel, Detroit, March 12-13-14, 1958 are:

Henry T. Bahnson, M.D., Baltimore, Md.
 Laurence W. Kinsell, M.D., Oakland, Calif.
 Alexander T. Aitken, M.D., Brookline, Mass.
 Preston A. Wade, M.D., New York, N. Y.
 Edgar V. Allen, M.D., Rochester, Minn.
 Charles H. Rammelkamp, M.D., Cleveland, O.
 Isidore Snapper, M.D., New York, N. Y.
 John Parks, M.D., Washington, D. C.
 Clement A. Smith, M.D., Boston, Mass.
 William M. Wallace, M.D., Cleveland, O.
 H. D. Fabing, M.D., Cincinnati, O.
 Maxwell Finland, M.D., Boston, Mass.
 M. B. Sulzberger, M.D., New York, N. Y.
 Clyde L. Randall, M.D., Buffalo, N. Y.
 G. N. Papanicolaou, M.D., New York, N. Y.

The complete program will be published in the December number of *JMSMS*. Meanwhile, General Chairman of Arrangements C. E. Umphrey, M.D., Detroit, urges all who plan to attend this new-type "refresher course" to secure hotel reservations in Detroit now. Last year, 1,654 doctors of medicine attended the MCI, taxing the capacity of every hotel in Detroit.

SIXTH ANNUAL SYMPOSIUM ON TRAUMA

Sponsored by

Wayne State University College of Medicine and
 Michigan Regional Committee on Trauma

Wednesday, December 4, 1957

Registration: 9:00 a.m.

Morning Session: Ward Rounds and Operating Procedures at Detroit Receiving Hospital

Noon Luncheon: Wayne State University College of Medicine

Afternoon Session: "The Many Phases of the Care of Trauma Patients"

Write: H. M. Smathers, M.D.
 14219 W. McNichols Road
 Detroit 35, Michigan

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Statement of Principles Between Physicians and Lawyers

After three years' study, the Joint Committee with the State Bar of Michigan developed a statement of principles to guide doctors of medicine and members of the Bar in the conduct of court cases. This statement has been approved by both the Michigan State Medical Society in Annual Session in Grand Rapids, September 23-24, and by the State Bar of Michigan, at its Detroit Convention of October 2-3-4, 1957.

The Joint Committee which developed these principles was composed of three MSMS members and three representatives of the State Bar: W. M. LeFevre, M.D., Muskegon, Chairman for the medical group, A. A. Humphrey, M.D., Battle Creek, and F. D. MacMillan, M.D., Detroit. Leroy G. Vandever, Detroit, Chairman for the legal group, Frank C. Smith, Flint, and J. Adrian Rosenburg, Jackson.

The Statement of Principles is as follows:

Preamble

In recognition of the public service obligations common to the medical and legal professions, and in the belief that such action will promote a closer co-operation and assist in maintaining a harmonious and compatible relationship between the two professions, thus serving the public interest, the Michigan State Medical Society and State Bar of Michigan do hereby adopt the following Statement of Principles governing physicians and lawyers.

Medical Reports Requested by Attorneys

1. Where a report is requested by the patient's attorney, upon authorization from the patient, the physician should furnish to the attorney such report with reasonable promptness.

2. The contents of such report should be such as to permit the attorney to protect the interests of the patient fully and properly and compatibly with the attorney-client relationship.

3. When requesting such report, the attorney should clearly specify the information desired, and make known to the physician whether or not it is to embody opinions regarding diagnosis, prognosis and disability evaluation.

4. The attorney should recognize that it is not always possible for the physician to prepare a medical report on short notice. Where the physician may indicate that he deems it necessary or advisable before submitting such report to have the opportunity of seeing and examining the patient, the attorney should co-operate with the physician by arranging for his client to be seen by the physician.

5. When a medical report is requested by an attorney, he should not take the time of the physician for a conference unless:

- (a) It appears to the attorney that a conference is necessary for a proper report, or
- (b) The physician requests such a conference before furnishing his report.

6. After the physician has furnished a report, if either the physician or the attorney feels it necessary or desirable to hold a conference with reference to the contents of the report, the attorney should be cognizant of the demands of time made upon the physician, and

should co-operate to arrange such conference at a time and place indicated by the physician to be most convenient and suitable.

Co-operation between Physician and Attorney in Cases Expected to be Tried and Where Attorney Proposes to Present Physician as a Witness

1. It is the duty of the attorney to furnish to the physician reasonable advance notice that the case is approaching trial, and that the physician is expected to be called as a witness on the trial of the case.

2. It is the duty of the attorney to make inquiry and ascertain from the physician as to any hospital records in appropriate cases, or other records not under the direct control or possession of the physician, including x-rays or reports thereof or other medical records and reports the physician desires to have available at the time of his being a witness on the trial of the case, and to make the necessary arrangements so that such reports are thus available for the use of the physician at such time.

3. It is the duty of the attorney to request and remind the physician to bring with him at the time he appears as a witness his own office records with reference to his patient.

4. It is the duty of the attorney, after the physician requests the opportunity of seeing and examining the patient before trial, to arrange for the patient to be seen by the physician.

5. It is the duty of the physician at this time to review his own office records and any other records pertaining to his patient so as to co-operate with the attorney in the preparation of the trial of the case.

6. While the physician may have heretofore furnished a medical report to the attorney, the physician should recognize that such prior report was likely furnished for the principal purpose of permitting the attorney to properly plead his client's medical claims in the case. The physician should further recognize that at this time, for the attorney to fully protect the interest of his client, it may be necessary or advisable for the attorney to request a supplemental and amplified report in the preparation for the trial of the case, and it is the duty of the physician to co-operate with the attorney where authorized by the patient to furnish such supplemental and amplified medical report.

7. In some cases, it should be recognized by both the attorney and the physician that it is necessary or most desirable that a conference or conferences be had between the attorney and the physician in advance of the physician appearing as a witness on the trial of the case, whereby the physician is afforded an opportunity of discussing with the attorney the medical aspects of the case from the physician's viewpoint, particularly any technical medical matters pertaining thereto. An opportunity is thus afforded to the attorney of discussing with the physician the legal rules and the position occupied by the physician as a witness on the trial of the case, resulting in mutual co-operation for the best interest of the patient of the physician and the client of the attorney in the presentment of the case in court. Where, however, the physician and attorney mutually agree that such a conference is unnecessary it should be avoided in the interest of saving the time of both the physician and the attorney. Where such conference or conferences are deemed necessary or advisable, the attorney should recognize a duty to arrange for them.

(Continued on Page 1378)

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(Continued from Page 1376)

time and place for such conference or conferences as most convenient and suitable to the physician.

8. It is the duty of the attorney, in accordance with the ethics of his profession, that under no circumstances should he seek or attempt, in any manner, to persuade the physician to distort or color his testimony.

9. The physician should recognize the moral, as well as the legal, obligation of appearing in court as a witness on behalf of his patient, and should understand that medical testimony is frequently indispensable to prove or disprove medical claims presented in a case.

The Physician as a Witness on the Trial of the Case

1. It is required that parties, attorneys and witnesses, including physicians who are called to testify, recognize that the administration of justice by the courts and the trial of cases by the judges thereof cannot depend upon the convenience of such persons.

2. The attorney owes a duty to the physician who is to be a witness on the trial of the case to notify him as far in advance as possible as to when he is to be needed to testify, and to keep him informed and advised as to any changes with respect to the time of his appearance in court as the trial develops.

3. The attorney should notify the physician promptly of any settlement or other development during the trial of the case, the result of which is to eliminate the calling of the physician as a witness on the trial, so that the physician, who likely has set aside the time in which he is expected to be in court as a witness, may have the opportunity of making other commitments for this time.

4. The attorney should have available for the physician when he appears as a witness all hospital and any other records which the attorney and physician have theretofore agreed shall be at the place of trial for the physician's use.

5. The physician should attend court at the time appointed. The attorney should appreciate, however, that a physician has continuing and often unpredictable responsibilities to his patients. Insofar as the attorney is able, he should make arrangements to permit the physician to testify with a minimum of inconvenience and delay to him.

6. The physician while testifying should answer questions as concisely and objectively as possible, with a terminology, when permissible, which will be most understandable to a jury of laymen.

7. If the physician is asked a question to which he does not know the answer, he should so state and make no attempt to speculate or guess or theorize or give answers not responsive to the question propounded, and the physician should not volunteer testimony.

8. In the giving of testimony, the physician, under no circumstances, should permit any bias, prejudice or favoritism or personal interest to influence or affect his testimony.

9. When questioning the physician witness, an attorney should at all times refrain from unwarrantedly browbeating or badgering the physician. A physician testifying as a witness should know that if and when he feels that an attorney is improperly or unfairly conducting an examination of him as a witness, the physician may address the court and inquire if he is required to submit to such treatment.

10. The attorney owes a duty to the physician witness to prepare and propound all questions to the witness in such form and manner as will permit a clear understanding and a forthright answer from the physician witness.

11. An attorney who calls a physician to testify as an expert witness should, in advance of the physician's appearance in court, advise the physician of his intention to qualify and question him as an expert witness, and where it is proposed to use a hypothetical question,

should in advance of the trial converse with the physician and explain to him the use of such hypothetical question, so that at the time the physician in his capacity as an expert witness is propounded such question, he will have a reasonable understanding of the use of the hypothetical question and the limitations with reference to his answer to such form of question.

Compensation for Services of Physicians

1. It is the duty of the attorney where necessary, to explain to his client the physician's bill for services and the itemization thereof. In cases where the physician aided in preparing the case but did not have the opportunity to testify or failed to testify because of a settlement prior to his being called as a witness, it is the responsibility of the attorney to advise his client of the physician's assistance and services in the case, and thus to co-operate with the physician for the purpose of seeing that such physician receives a reasonable fee for such services.

2. A physician who, at the request of an attorney, furnishes a medical report authorized by the patient, should receive a nominal fee for this service, and it is the duty of the attorney to co-operate with the physician to see that he receives such fee. If such medical report requires extraordinary services in its preparation either as to time and contents, or the case is of such a nature that the medical aspects thereof require the physician to have a conference or conferences with the attorney, or to furnish subsequent supplemental and/or amplified medical report, the physician is entitled to a reasonable compensation for such professional services rendered, and it is the duty of the attorney to co-operate to see that such physician receives reasonable compensation in rendering such professional services. Where, after an original medical report, the physician is requested to perform further services in assisting in the preparation of the case for trial by furnishing supplemental or amplified reports and conferring with the attorney or rendering other services, it is recommended that when feasible, an agreed fee for such services be determined in advance after consultation with the attorney.

3. Where it appears that the patient is indigent or unable to make payment, the right to compensation for services in assisting the attorney in the preparation of the case for trial may be waived by the physician, or where it appears that the financial status of the patient is such that ordinary reasonable compensation to the physician for his services will work a hardship, the physician may take this into consideration in determining his fee for services in assisting the attorney in the preparation of the case for trial.

4. Where a physician testifies as a witness, under no circumstances should the physician's charge for his time as a witness, or his fee, if qualified and testifying as an expert witness, be contingent or determined by the amount of the recovery of the patient in the litigation, or the success or lack of success of the patient's case.

5. Compensation for the services of a physician in connection with assisting in the preparation of the case or for his appearance as a witness in court should be on a reasonable basis and based on the time and nature of the services performed.

6. It is the duty of the attorney to co-operate fully with the physician by assisting the physician to obtain payment for services properly rendered by the physician to his patient in the physician-patient relationship. It is the further duty of the attorney to co-operate with the physician to obtain payment from the patient for services rendered by the physician to the attorney in the preparation and/or trial of the patient's case.

Inter-Professional Courtesy and Understanding

1. For the medical and legal professions to perform the full duties owed to society by each, it is required that the members of each profession extend toward the

(Continued on Page 1394)

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Supplied: 10 cc. multiple-dose vials. The adult dosage is 25 mg. to 50 mg. (1-2 cc.) intramuscularly, 3 to 4 times daily, at 4 hour intervals. The moderated dosage level for children under 12, when given intramuscularly, has not yet been established, and the oral dosage should be used.



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Heart Beats

PHYSICIAN'S MANUAL ON CONGENITAL CARDIAC DEFECTS PUBLISHED

The American Heart Association has issued a new booklet entitled "Congenital Cardiac Defects—A Physician's Guide for Evaluation and Management." The publication was prepared by the Committee on Congenital Heart Disease of the Association's Council on Rheumatic Fever and Congenital Heart Disease, Ruth Whittemore, M.D., Chairman.

Designed primarily for the physician who is not a cardiologist, the 27-page booklet will help doctors who encounter patients with congenital malformations of the heart to decide whether and when such patients should have special studies done in a cardiac center or by a cardiologist familiar with these problems.

The Association has also issued a report setting standards for services and equipment in centers responsible for the diagnosis and surgical care of patients with congenital defects of the heart and blood vessels. The report, entitled "Standards for Centers Caring For Patients with Congenital Cardiac Defects," appeared originally in the April, 1956, issue of the Association's professional journal, *Circulation*, and is of particular interest to directors of centers concerned with diagnosis and surgery for patients with congenital cardiac defects. The report was prepared by the American Heart Association's Subcommittee on Education and Standards in the Field of Congenital Heart Disease.

Single copies of both pamphlets are available free from the Michigan Heart Association at the address listed below.

RESEARCH GRANTS FOR THE STUDY OF THE EFFECT OF ASIAN INFLUENZA UPON THE CARDIOVASCULAR SYSTEM

Recognizing the possibility that Asian influenza may appear in sizeable quantity in this country in the near future, the National Advisory Heart Council has recommended that the National Heart Institute encourage research on the effects of Asian influenza upon the cardiovascular system.

National Heart Institute research grants are available on a competitive basis to investigators wishing to study the cardiovascular-renal effects of influenza. Applications will be processed as rapidly as possible. Research grant applications may be obtained by writing directly to: Dr. Her-

man E. Schmid, Jr., Grants and Training Branch, National Heart Institute, National Institutes of Health, Bethesda 14, Maryland.

NEW PROFESSIONAL FILM SHOWS DISORDERS OF THE HEART BEAT

"Disorders of the Heart Beat" is the title of a new 22-minute professional film produced in color for the American Heart Association and its affiliates by Churchill-Wexler, Los Angeles. Wyeth Laboratories, Philadelphia, sponsored the production.

Using animation, the motion picture explains the theory of how abnormal heart beats develop and shows how these look on the electrocardiogram and phonogram. The film presents aspects of premature beats, paroxysmal tachycardia, fibrillation and flutter, and various conduction defects.

The new film is available—on a free-loan basis—from the Michigan Heart Association.

BOOKLET ON HIGH BLOOD PRESSURE AVAILABLE TO PHYSICIANS TREATING HYPERTENSIVE PATIENTS

"High Blood Pressure" is the title of a new American Heart Association booklet written by Edgar V. Allen, M.D., Association President, who is Senior Consultant in Medicine at the Mayo Clinic, Rochester, Minnesota.

To be distributed by physicians to high blood pressure patients under their care, the 14-page booklet explains what is known today about high blood pressure and what the patient can do to help his physician treat him most effectively.

Dr. Allen warns against self-diagnosis and excessive concern of a hypertensive patient with the blood pressure readings. The author stresses that so much has been learned in recent years about how to treat hypertension that the outlook for patients is now more favorable than ever before.

Single copies are available free from the Michigan Heart Association.

* * *

For further information or copies of the materials listed above, write to the Michigan Heart Association, Doctors' Building, 3919 John R, Detroit 1, Michigan.

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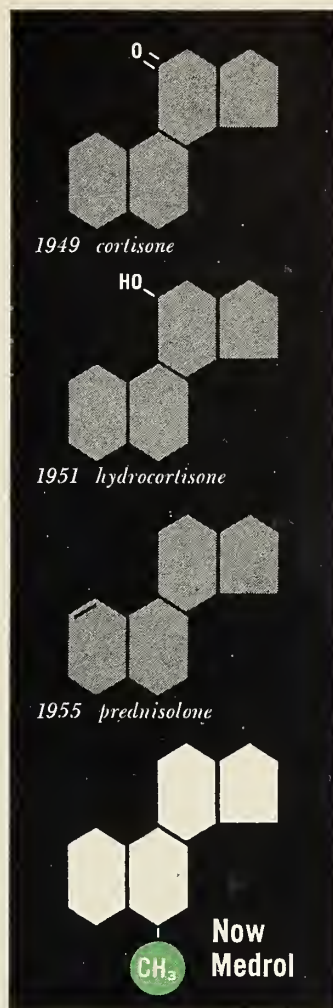
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AMA Washington Letter

THE MONTH IN WASHINGTON

Several months in advance of the return of the 85th Congress for its election-year second session, influential figures in the field of health in both the executive branch and in Congress were being heard on what 1958 has in store for the medical profession.

Because of the roles they play in the Capital, their views are worth more than passing notice. One is the chairman of the important health appropriations subcommittee of the House, Rep. John Fogarty (D., R. I.). He used as a forum for his prophecies the annual convention of the American Hospital Association.

Other prognostications came from Dr. Aims C. McGuinness, special assistant for health and medical affairs to Secretary Folsom of the Department of Health, Education, and Welfare. Dr. McGuinness spoke out at a dedication ceremony of a new chronic disease and rehabilitation facility in Maine.

Mr. Fogarty places at the top of his predictions some action on federal construction aid to medical schools. The Rhode Island Democrat has his own bill on the subject, although there are others pending. Comments Mr. Fogarty: "... the shortage of health education facilities today is probably the most serious bottleneck in our whole medical system. . . . These schools . . . fall far short of accommodating the fully qualified and competent young men and women in America who are anxious to train and qualify in medical, dental and public health fields."

The record of the past several years has shown that no member of the House is listened to more carefully when it comes to health than Mr. Fogarty. His philosophy in the health field is worth noting: "It is now generally accepted that the health of our people is a major resource and that the government, therefore, has a direct responsibility for the health of everyone."

Dr. McGuinness also spoke out strongly for federal aid to medical schools. Failure to meet the needs of the schools, he told his audience, would be "the worst kind of economy." He feels that the administration proposal for \$225 million in construction grants would bring classrooms and research laboratories "much closer to current and projected needs."

While neither man had any specific legislative proposals to make in the field, both foresee a growing role for hospitals in the practice of medicine. Dr. McGuinness put it this way: "General hospitals must broaden their services and achieve greater co-ordination. The term 'hospital care'

should include not only bed care but diagnostic service as well as service to ambulatory patients."

Mr. Fogarty, looking ahead 25 years, said it was safe to predict that virtually every general hospital in the Nation will be providing at least as much preventive service as curative service. "You are, in fact, moving closer each moment to the day when hospitals will be the focal point of health services for all of us, throughout our entire lives."

The same day that Mr. Fogarty was urging the hospitals to use the basic Hill-Burton hospital construction program to meet future health needs, the AHA House of Delegates approved a set of legislative proposals to present to the next session.

They would accomplish the following: (1) extend the act for five years beyond June, 1959, (2) authorize matching Hill-Burton funds for renovation and repairs of hospital plants, (3) set up loan authority so that hospitals not desiring grant money could borrow construction and renovation funds at very low interest rates (from 1½ to 2%). The house also urged a grants program to hospitals with nursing schools and to other nurse institutions for professional education, exclusive of construction grants.

Notes

One committee of Congress knows months in advance just exactly what it plans to do the day Congress reconvenes. The tax-writing House Ways and Means Committee has set hearings starting January 7 on possible tax reductions next year.

Included on the agenda will be testimony from various organizations on the Jenkins-Keogh bills for allowing tax deferments for money paid into retirement plans. The American Thrift Assembly, which is backed by the American Medical Association and other professional and business groups, plans to be heard at some time during the 30 days of hearings.

* * *

Veterans Administrator Harvey Higley believes that the public is losing interest in the veteran and his problems, and that some doctors no longer hesitate to attack medical care for veterans, particularly those with non-service-connected disabilities. Mr. Higley spoke at the annual American Legion convention.

* * *

Health directors of twenty-one American republics, holding their annual Pan American Sanitary Organization meeting here this fall, voted a \$3 million budget for the Pan American Sanitary Bureau's 160-odd health projects for next year.

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AMA News Notes

CIVIL DEFENSE MEETING

The eighth annual County Medical Societies Civil Defense Conference was held November 9-10 at Chicago's Morrison Hotel. Sponsored by the AMA Council on National Defense, the Conference helped local medical and health personnel plan their roles in disaster and civil defense emergencies. Congresswoman Martha W. Griffiths of Michigan reported on the status of national civil defense legislation which received considerable attention during the first session of the 85th congress. Mrs. Griffiths is a member of the House Committee on Government Operations and its Subcommittee on Military Operations.

Another highlight of the Conference was reports on the experience gained through several test operational exercises conducted under simulated disaster conditions, including a critique of the national exercise "Operation Alert."

Additional reports were given on such subjects as general preparedness planning, hospital operational preparedness, the role of the county medical society, radiological aspects of radiation fallout, the AMA-FCDA study project, the AMA program on Asian influenza. The group broke up into small sections to discuss specific problems.

AMA COMMITTEE MEETINGS

Two committees of the AMA Council on Medical Service plan regional meetings Monday, December 2, in Philadelphia just prior to the AMA's eleventh Clinical Session. *The Committee on Maternal and Child Care*—first regional meeting on perinatal mortality and morbidity. Invitations are being sent to members of maternal and child care committees in Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Ohio, Pennsylvania, Rhode Island, Vermont, Virginia, West Virginia. *The Committee on Aging*—third regional conference for members of state committees on aging. Subjects to be discussed include physical examinations and a health maintenance program, guides for the organization and operation of medical society committees on aging, medical education in caring for the aged, preretirement counseling, and special research programs of a medical school.

Physicians interested in attending either of these sessions should contact the Council for further details.

MEDICAL EDUCATION CONGRESS

Problems confronting medical education in the rapidly changing scene will be the main topic of concern at the 54th annual Congress on Medical Education and Licensure February 9-11. Sponsored by the AMA Council on Medical Education and Hospitals, the Federation of State Medical Boards of the United States and the Advisory Board for Medical Specialties, the Congress will be held at the Palmer House, Chicago.

The conferees will view medical education's broad potential in the light of four factors—the changing characteristics of the nation's population, sociological trends, economy and medical knowledge—and the implications of these factors on medical education, medical research and medical care.

In addition, four workshop committees—composed of representatives from the AMA, the Council, the AAMC, higher education, government, business, insurance, labor and agriculture—will discuss various problem areas, endeavor to clarify questions that need to be raised and recommend possible ways that medicine can assume the leadership in solving these problems. The committees' reports will be presented before the entire Congress for discussion from the floor.

On Monday morning, February 10, the Council will conduct its annual co-sponsored meeting with the Advisory Board. This session will be devoted principally to discussions of problems in graduate medical education created by the changing status of the patient and the role of the community hospital in graduate medical education. The Federation will hold its second examination institute on Saturday, February 8, and its regular meeting on Tuesday, February 11.

CANCER FILM BOOKINGS THROUGH AMA

Hope in the thought that 75,000 lives in America need not be lost needlessly to cancer each year is the theme of a dramatic educational film recently added to the AMA Film Library. Titled "The Other City," the film stresses the encouraging fact that doctors currently are saving one in three patients as compared with a previous one-in-four ratio. Setting of the film is Racine, Wisconsin. Four basic thoughts are developed: (1) Racine empty and lifeless; (2) a symbolic representation of what cancer is; (3) how the 75,000 inhabitants of this token city could have helped save themselves, and (4) Racine alive and bustling.

Produced by the American Cancer Society, the 16mm color film runs 22 minutes and 30 seconds. It is suitable for showings on local television as well as for church, club and school gatherings. Medical societies may book the film through the AMA Film Library.

RESEARCH FOUNDATION ESTABLISHED

The American Medical Research Foundation recently was established by the AMA. Principal purposes of the Foundation will be: (1) to promote the betterment of public health through scientific and medical research (2) to plan and initiate scientific and medical research and (3) to collect, correlate, evaluate and disseminate results of scientific and medical research activities to the general public. Voting members of the Foundation will be AMA trustees. Meetings will be held annually at the time of the AMA Annual Sessions.

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What They Thought About the 1957 MSMS Annual Session

Leon Goldman, M.D., Cincinnati (guest essayist): "I wish to thank you for the many courtesies and privileges extended to me at the recent meeting of the Michigan State Medical Society. I have been to a number of meetings, both as guest and just as a relaxed bystander, but I have never seen such efficient organizational details as I have seen you all do. This was a real lesson in administration for us who conduct meetings from the time of the initial invitation until the time when the guest is tucked away on his plane or train. I feel I have really learned a lot about administration, and I am very grateful. Thank you again."

Theodore Winship, M.D., Washington, D. C. (guest essayist): "My visit to Grand Rapids was most enjoyable and I found the audience unusually responsive and courteous."

Samuel Bellet, M.D., Philadelphia (guest essayist): "Thank you very much for inviting me to participate in this symposium and I certainly appreciate the courtesies you showed me."

Paul A. Bowers, M.D., Philadelphia (guest essayist): "I wish to take this opportunity to express my appreciation to the members of the Michigan State Medical Society for the very cordial reception which I received during your recent meeting."

Keith Hammond, M.D., Paoli, Ind. (Councilor, Indiana State Medical Association): "I would like to take this opportunity to thank you for the gracious way in which we were attended and entertained during our recent visit in Grand Rapids at the meeting of the Michigan State Medical Society. Our stay was a most pleasant one."

Wm. S. Reveno, M.D., Detroit (Chairman, MSMS Preventive Medicine Committee): "Word comes to me of the superb show you put on at Grand Rapids. I'm not surprised—because that's what I expected."

J. Raymond Knighton, Executive Secretary, Christian Medical Society, Chicago: "I would like to express our appreciation for the privilege of exhibiting at the recent MSMS meeting in Grand Rapids. Although we have been exhibiting at many medical meetings over the past few years, it is the consensus that the response we received at this meeting was as good, if not better, than any previous exhibit. We would also like to commend you on the very efficient handling of the exposition by your Executive Director, William J. Burns. Mr. Burns and staff co-operated most effectively to make our exhibit efficient and profitable."

William N. Smith, S. E. Massengill Company, Bristol, Tenn.: "Just a note to say how much I enjoyed attending the MSMS convention last week. This meeting was one of the best organized conventions I have attended. You certainly deserved the standing ovation for a job much more than 'well done.'"

L. G. Dickson, Secretary, Class of 1959, Wayne State University College of Medicine: "On behalf of myself and my classmates, who joined me as guests at the recent MSMS convention in Grand Rapids, may I thank you for the opportunity you offered us. We certainly appreciated this chance to attend the meeting and exhibition. Medical students certainly welcome such an educational experience offered in so generous a spirit. My attendance at this convention, in all respects, has been a valuable addition to my medical education."

Leo H. Bartemier, M.D., Baltimore (guest essayist): "It was pleasant to see all you folks again, even for a brief moment."

Peter C. Kronfeld, M.D., Chicago (guest essayist): "I enjoyed the Michigan State Medical Society Meeting very much."

Adelaide M. Johnson, M.D., Rochester, Minnesota (guest essayist): "I found the meetings stimulating and very much enjoyed participating. The audience was the responsive kind that is very gratifying to the speaker."

James W. Burks, Jr., M.D., New Orleans (guest essayist): "I should like to express my appreciation for the honor bestowed upon me in having me participate in your recent meeting in Grand Rapids, and to thank you for making my effort a pleasant one. Your hospitality was very much appreciated."

Edward Press, M.D., New York (guest essayist): "I am glad to be of help at your meeting and would like to commend you on how smoothly and efficiently run the session was. I appreciate the hospitality extended to me at your meeting."

Hans H. Hecht, M.D., Salt Lake City (guest essayist): "I certainly appreciated the courtesy of your invitation and the wonderful reception that I received in Michigan."

Charles Morrill, Secretary, Class of '59, University of Michigan Medical School: "I want to take this opportunity to thank the Michigan State Medical Society for the privilege of attending the meetings of the House Delegates. It was certainly enlightening to be able to see the policy-making body of the medical profession in Michigan in action."

"One can now appreciate that there will be many problems concerning us as future physicians aside from knowing and putting into practice medical knowledge. We should now be able to expand our Student American Medical Society to make certain that our education program trains the 'whole' doctor and not just the 'technical' doctor, important as this is."

"I sincerely appreciate the accommodations that were provided and hope that other students may be able to attend future MSMS conventions. Thank you."

Albert V. Whitehall, Vice Chairman, Health Insurance Council, New York: "This is belated appreciation of your hospitality at your recent meeting and to compliment you on its success. Two things stood out to me. The effectiveness of Hugh Brenneman for the tremendous public relations impact of your program. He is a real pro. Second was the efficiency of your staff in handling registration. It reminded me of a warm-hearted, cordial IBM machine and seemed to have just the friendly touch that could be traced right back to one Bill Burns."

Kieffer Davis, M.D., Bartlesville, Oklahoma (guest speaker): "Thank you and many of your fellow workers in the Michigan State Medical Society for making my visit in Grand Rapids quite a delightful one. I don't know when I have ever been treated quite so royally."

E. W. Schoenheit, M.D., President of the Medical Society of the State of North Carolina (guest): "I wish to express my grateful appreciation to you and to the Michigan State Medical Society Members for their hospitality, and for the kind administration to me during my Michigan stay. I take this opportunity to tell you what a pleasure it was to see you and how much I enjoyed being at the MSMS meeting."

John D. Porterfield, M.D., Washington, D. C. (guest essayist): "I appreciated very much the opportunity to speak both at the General Assembly and before the Preventive Medicine Section, and thoroughly enjoyed the opportunity to talk with Michigan Physicians during the informal hours. I must say to you truly that I have never been more graciously hosted at any other medical meeting."

Paul K. Danielson, Kansas City, Missouri (exhibitor): "I would like to compliment you on the very efficient and effective way in which the Michigan State Medical Society 1957 Annual Session and Exhibit at the Civic Auditorium in Grand Rapids was conducted. I have made medical meetings in almost every state and without a doubt, yours is tops."

Thomas H. Alphin, M.D., Washington, D. C. (Washington Office of American Medical Association): "It was a great pleasure to be present on such a momentous and auspicious occasion and of course it is always a privilege to see a well organized state medical society in operation. Democracy may be taking a beating in many areas but it certainly stands foursquare in Michigan medical circles. Considering the strong winds and storms of your area that is a notable achievement."

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The Physician and City Commissions

By L. A. Drolett, M.D.
Lansing, Michigan

MY INTEREST in the fire department stems from my youth. It has always seemed to me the most interesting business in the world. By appointment of the mayor, I have been a member of the Board of Police and Fire Commissioners of Lansing for the past sixteen years. The eight to ten hours a month given to this project are a donation which I feel that I owe to my community.

The commission is made up of nonsalaried citizens who donate their time and services to the governing of these two departments. A physician on this board has a splendid opportunity to exchange ideas with laymen and to glean an insight into men's reactions under extreme pressure and tension. The emotional status, physical stature, sincerity of purpose, and intelligence of candidates must be evaluated by committee members of the board. As a doctor, I find my medical training of great assistance in choosing men for these departments.

Several years ago it came to my attention, as a result of complaints by the fracture committee of the American College of Surgeons, that people involved in accidents on the street were being badly mishandled by ambulance crews. Fractures were being compounded by injudicious handling. After some study of the problem in various cities throughout the country I came to the conclusion that perhaps the fire department should handle ambulance equipment rather than the police.

Dr. Drolett is Commissioner of the Police and Fire Departments of Lansing, Michigan.

They had more time to take the necessary training. So, in spite of considerable protest, this transfer was made. More modern equipment was added to the ambulance, splints and an inhalator were supplied, sterile dressings, cots, and even a physician's bag were installed.

Forty firemen were trained by me to operate this ambulance. They were trained in the use of the inhalator, in proper splinting, and other first aid measures. Later, a second ambulance was added to the department and, today, all street accidents within the city limits are responded to by city ambulances. The patients from street accidents are splinted on the scene and any wounds are sterilely dressed, bleeding is controlled by intelligently applied tourniquets, and patients are transported to the hospitals in good condition, compared to the rough and ready old days. In addition, these keenly trained men make many inhalator call runs in the community taking orders from the doctor who is called simultaneously.

The public has come to recognize this service and appreciate the dollar value of this training and equipment, and many other cities have adopted a similar fire department ambulance service.

Our commission has insisted on both the fire and police departments using the facilities of Michigan State University and various federal schools in Washington and Memphis, Tennessee. Numerous police and firemen have been sent to these schools at city expense to return and pay rich dividends with the knowledge gained. Recently, at the request of the Federal Bureau of Narcotics, two

detectives were given twenty-one days of intensive training in Washington, D. C., in narcotic investigations. It has been amazing to watch these two men quietly at work in the city investigating complaints of local pharmacists. They have learned so much in such a short period of training. It is developing that the physician is quite frequently the greater violator in careless prescribing of narcotics and too often may be an addict himself.

Other officers are graduates of a ninety-day training period at the FBI school in Washington, and are used as instructors in addition to their regular duties of investigation of crime.

As a senior member of our commission, I am proud of the fact that our departments are becoming more highly skilled and efficient and are rapidly becoming professionalized with highly trained technicians, able to render the best possible service for the tax dollar.

The police and fire departments are obviously our first line of defense in case of local disaster, such as tornado, catastrophic fire, or enemy attack. With this in mind, a process of emergency training has been set up to coordinate with the doctors of the community. These departments must be ready immediately to undertake first aid that might take hours for the civil defense authorities to take over. The Ingham County Medical Society has equipped three emergency field trunks; one is kept in each of the hospitals and one in the central fire station. These trunks are kept in excellent condition under the supervision of command officers of the depart-

ment. They are stocked with plasma, sterile dressings, tourniquets, surgical instruments, and any equipment that we feel can be used to set up a portable field hospital at the scene of disaster. The firemen constantly check this equipment and maintain it for immediate use.

In the activities of the fire department today, perhaps more than at any other time, the personnel are being called upon to deal with noxious gases and fire hazards that were nonexistent ten to fifteen years ago. The men must be educated and trained to cope with these situations in order to survive. In accepting this training, it is interesting to note that the men are eager and willing to learn more about their jobs. Undoubtedly, this attitude stems from the commission's insistence on advanced training for the men in the department. The men in the police department have likewise steeled themselves to cope with the extreme violence of crime as it exists today. Many "fight calls" result in the apprehension of individuals who will kill on very little provocation.

My sixteen years of service to the community on the Police and Fire Commission have been gratifying to me. I feel very keenly that it is every physician's duty not only to render service to his profession but in some way to try and add his bit to community effort. If he does, he will gain the confidence of the public and express to the people that we are interested not only in their physical well-being but also in their community welfare.

STATEMENT OF PRINCIPLES BETWEEN PHYSICIANS AND LAWYERS

(Continued from Page 1378)

other full courtesies and amenities and engage in a mutual understanding of the problems of each other.

2. It is required that the attorney understand the vast demands made upon the time of the members of the medical profession, and at all times to avoid unnecessarily claiming the time of any physician either in the attorney's preparation of the case for trial, or while engaged in the trial of the case.

3. It likewise is required that the physician understand that in many instances, the legal rights of the patients, in litigation having medical aspects, may be properly protected only by the attorney seeking and obtaining the time and services of the physician in the preparation and trial of the case.

4. Courtesy requires, where necessary, that the attorney assist and enlighten the physician with respect to his position as a witness on the trial of the case, his role as a witness, and the rules to be observed in connection with the matter of giving testimony in court.

5. Courtesy requires of the physician that he aid the attorney so that the attorney may be enlightened on the highly specialized medical aspects of the case, and

may be assisted in properly presenting on the trial of the case the medical phases involved through sufficient understanding with the physician to conduct an intelligent examination of the physician witness.

6. Courtesy requires that the attorney co-operate with the physician to minimize as far as practicable the time required for the physician to remain in court.

7. If an attorney plans to have a subpoena served upon a physician, wherever practicable, the physician should be notified in advance and service made in arrangements convenient and acceptable to the physician.

8. Courtesy requires that wherever practicable, attorney and physician should consult in advance with reference to the fee of the physician to be charged for his time spent in attendance in court as a witness.

9. Courtesy requires that where, by requirement of statute, the amount of an expert's fee may be set by the court, the physician be notified thereof in advance, with the further assurance of the attorney that he will petition the court, at the proper time, for order setting a proper and reasonable fee for the physician's services as an expert witness.

The Doctor and the Service Club

By T. E. Schmidt, M.D.
Jackson, Michigan

YOU'RE no "joiner." You're too busy, but you accept the invitation to attend a service club luncheon meeting just to please the guy. Said he'd have you back by 1:45.

There's a lot of jovial milling around and friendly banter. Everybody wears an absurdly huge luncheon badge. Calls each other by his first name. Seems nice. Nobody has a board up his back.

The membership startles you. Almost everyone is the head of some important business. You're introduced around and, as you sit down, you look the room over and find most of the leaders in the community present. Table conversation is refreshingly free from professional matters. You're surprised to find you are having a good time in very congenial company.

After the meal, a couple of lively songs. Some are a bit off-key, but no matter. You join in. They really go all-out on "Smiles"—a favorite. You're amazed at the guests. They're from all over. Most of them from nearby clubs, but there's one from Melbourne, Australia, and one from Uppsala, Sweden, on a business trip to this country, but they keep up their attendance standing by attending meetings here. You're told this service club has over 9,500 clubs in 104 countries. More countries than belong to the U.N. Over 400,000 business and professional men belong to this international organization. Over 10,000 usually attend international conventions held annually. Must be quite an experience. Meeting men from all over the world. You wonder what attracts so many busy men into the service club movement.

You begin to suspect that this is more than a luncheon club on hearing a few brief committee reports—members transporting sixty crippled children to a summer camp supported by the club, a progress report on city planning and slum clearance initiated by the club, commitments obtained in local concerns to furnish leadership and sponsor fifteen Junior Achievement groups, an experience in private enterprise for youngsters. Dr. Sams, whom you well know to be a friend to all young doctors (he helped you when

you first began practice), reports that his committee is going to enlarge the playground and youth center which the club sponsors. Dr. Sams carries a heavy professional schedule, is active in medical affairs and has done much to encourage high ethical standards in your profession. You learn that he is a past president of the club and is very active in community affairs. An all-around citizen.

You're told that seven of the club's twenty-odd committees are hard at work on various community projects. The genuine enthusiasm shown in community work by these men impresses you. It's something they call "community service." Has nothing to do with their occupations.

It's time for the speaker. He's a lad in his twenties. Most of the members are old enough to be his father. But they listen attentively. He is just back from a year's graduate study in Italy. A clean-cut fellow. You're intrigued by his first hand knowledge and keen interpretation of the social, political and economic problems and customs of the Italian people. He bespeaks his gratitude to the members of the service club in Padova who opened their homes to him, the friendly courtesies, the numerous opportunities to speak to clubs about our own country and our way of life. You are experiencing not a mere vicarious adventure in foreign travel but an adventure in international friendship and understanding—a true ambassador of goodwill.

From the president's remarks you gather that this fine young man is one of some 130 carefully chosen young men and women from thirty-odd countries who have spent this year in a foreign land, sponsored by their home clubs through a three million dollar foundation financed by member clubs of this organization. Over six hundred such fellows have been sponsored by the foundation. Many are now filling important posts in their homelands and are still ambassadors of friendship between nations. It is one of many club projects in what is called "international service."

(Continued on Page 1396)

The Doctor and the School Board

By Warren B. Cooksey, M.D.

Detroit, Michigan

IT WAS thirty years ago this past July that I began my active medical practice. Early in those first years of practice, I made a strong resolve that I would try and spare some energy and time in an effort to be a good citizen as well as a good physician. I have not regretted this resolve for it has led me into some fields of usefulness and enjoyable friendly relationships that I cherish a great deal. It was apparent to me very early in some of my community responsibilities that there were too few doctors willing to devote some time to such things as the Community Chest, Social Services, and the Red Cross, and in such gatherings it was, and still is, a stirring experience to me to see how extremely welcome the presence of a physician in such committee meetings and endeavors can be. I can honestly say that many times in the past years, I have witnessed an absolute yearning on the part of citizen groups for the opinion and judgment of a physician member, and I do, indeed, feel that we physicians have a very great responsibility and obligation to help support, as much as our energy and talents permit, the various enterprises and philanthropies that make a community truly great.

I am sure that in all the activities in which I have participated, no experience has been quite the same challenging situation as that which I found when I was appointed to the Detroit Board of Education to replace the late Douglas A. Jamieson. I have found that at many points the physician, by background and training, can be useful in the conduct of the affairs of public education. There are indeed all sorts of human relationships that a school board must deal with very carefully, such as those related to emotional adjustments,

racial problems, traumatic accidents, and personnel situations. We, as physicians, are constantly analyzing factual data in order to come to a proper conclusion, and such problems as teacher retirement, salary adjustment, building costs, vocational training and guidance, curriculum, teacher and classroom shortages, to mention only a few, require the kind of mind that a physician must cultivate in order to practice medicine successfully.

I think it is inherent in the well-trained physician to adopt a *careful conservative* attitude toward life's situations and nowhere could such a background serve one in good stead better than serving on an active Board of Education, especially in a large school system such as Detroit. We physicians have had considerable opportunity by training and experience to acquire ability in public speaking and working under the glare of public opinion. The necessity of performing one's duties in open meetings with the ever present public press, and of carefully scrutinizing one's every word, is a situation it seems to me in which wide medical training and experience is a great asset indeed. It is my further observation that no finer group of people can be found in any community than those concerned with the training of our youth. I must say that I have enjoyed immensely my service on the Detroit Board of Education and I hope and believe I have at times been useful in solving some of the problems which we have faced. It seems undeniable to me that the finer the education provided our youth, the more certain it becomes that we will have happy and prosperous communities for the future. Whenever opportunity offers, therefore, I would urge physicians to participate actively in matters of public education.

THE DOCTOR AND THE SERVICE CLUB

(Continued from Page 1395)

Acquaintance, fellowship, friendship, community service, business and professional ethics, friend and example to youth, international understanding and goodwill—these are some of the aims and objects of service club membership.

You're back at your desk at 1:45. You're no "joiner," but maybe this service club business is more than appears on the surface. You're at least convinced that this town is a better town because it has a service club.

Use of Doxinate with Danthron as Withdrawal Therapy in the Treatment of Chronic Functional Constipation

Edmund S. Socha, M.D.
Ionia, Michigan

IN 1955, Wilson and Dickinson¹² published an original report describing the usefulness of dioctyl sodium sulfosuccinate in the treatment of constipation. Since that time the results of a number of other studies with this drug have appeared in the literature.^{1,3,4,8,9,10,11} Investigators have consistently found this substance to be an effective fecal softening agent. Animal experiments and extensive clinical observations failed to reveal any evidence of toxicity, probably because the agent is not appreciably absorbed.^{2,12}

In the treatment of constipation, dioctyl sodium sulfosuccinate produces a soft stool, and in those cases where chronic functional constipation is due to hardening of the feces, the drug should result in correction of the condition.

Where fecal hardening is complicated by the presence of an atonic bowel musculature, it is obvious that fecal softening action alone may not be fully effective without adjunctive therapy. In fact, the lack of effectiveness of dioctyl sodium sulfosuccinate in this type of constipation has been pointed out.⁷

In cases of this latter type, the simultaneous administration of a mild peristaltic stimulant may be desirable to aid elimination of the softened stool. Since the sole purpose of this adjunct to fecal softening is to aid evacuation, the ideal agent would be one which acted solely on the lower bowel with the least possible irritating action. Danthron (1,8 dihydroxyanthraquinone) is a suitable agent for this purpose and its effectiveness and safety have been fully demonstrated.⁶

A preparation combining dioctyl sodium sulfosuccinate and Danthron is commercially available.*

Dioctyl sodium sulfosuccinate exerts its effect by purely physical means. It reduces the interfacial

tension between the oil and aqueous phases of the heterogeneous material. It produces a softened and more homogeneous stool which is easier to evacuate. Unlike irritant laxatives, it obviates "rebound constipation." It eliminates the interference with absorption and the leakage often seen with mineral oil. It cannot cause "bloating" or impaction as can bulk laxatives.

It is apparent, therefore, that a combination of these two drugs would offer the advantages of easier movement and elimination of the fecal mass in chronic atonic constipation.

The problem of proper bowel management is an annoying one among the inmates of this reformatory. It may be due, at least in part, to the starchy food which constitutes a major portion of their diet; and to the fact that many of them have been taking cathartics more or less regularly even before entering the institution. The object of this study was to determine whether constipation could be corrected by the judicious use of dioctyl sodium sulfosuccinate and Danthron on a gradual withdrawal basis.

Material and Method

Our study included seventy-four male patients (forty-four colored and thirty white) who ranged in age from seventeen to thirty years. All of these patients were institutionalized and were receiving a similar diet. Each patient was asked a series of questions concerning his use of cathartics before entering the institution. The frequency of use of cathartics, frequency of the daily bowel movement, and liking for particular types of food were ascertained. This latter factor we believe to be in large part responsible for the frequency of the constipation problem in patients who otherwise had not been dependent on laxation before entering the institution. A classification of these patients based on this information is shown in Table I.

The group included fifty-four patients who had

Dr. Socha is Institutional Medical Director of the Michigan Reformatory.

*The combination used in this study was supplied as Doxinate with Danthron through the courtesy of Lloyd Brothers, Inc., Cincinnati, Ohio.

CHRONIC FUNCTIONAL CONSTIPATION—SOCHA

TABLE I. CLASSIFICATION OF PATIENTS ACCORDING TO DIETARY HABIT, USE OF CATHARTICS AND FREQUENCY OF THE BOWEL MOVEMENT

Particulars	Number of Patients
<i>Dietary Habit</i>	
Mostly Starchy Food	44
Balanced Diet	30
<i>Use of Cathartics</i>	
Daily	6
2-3 times a week	34
Once a week	12
1-2 times a month	10
Occasionally	12
<i>Frequency of Bowel Movement</i>	
Daily	20
Every other day	40
Twice a week or less.....	14

been habitually taking some form of cathartic to induce a bowel movement. The remaining twenty patients had been using cathartics more or less regularly after their arrival at the institution. Considering the dietary preference of the individual patients, forty-four patients indicated a strong liking for starchy food such as bread, spaghetti or potatoes. Before starting the therapy, fifty-four patients were not having a bowel movement more often than every second or third day and had complained of frequent difficulty in the elimination of a hard stool.

All the patients included in this study, except seven who left the institution earlier, were treated for a period of eight weeks. Each patient was given one or two capsules of Doxinate with Danthron on the first day together with 3 Doxinate 60 mg. capsules. The same medication was given on the second and the third day, except that Doxinate with Danthron was not given if the patient reported a satisfactory bowel movement following the therapy of the day before. On the fourth day, the patient was given only one capsule of Doxinate with Danthron together with 3 Doxinate 60 mg. capsules. In several cases, the use of Doxinate with Danthron was not needed after the second or third day. On the following days, the number of Doxinate 60 mg. capsules was gradually reduced from three to two to one each day, depending on the improvement in the regularity of the bowel movement of the patient. Where the bowel movement failed for two consecutive days, one capsule of Doxinate with Danthron was given the next evening together with the Doxinate capsules. All patients were given the medication by the attending nurse in person in their cells each day, and the response of the patient for the previous day was recorded at that time. Each patient

TABLE II. DURATION OF TREATMENT OF PATIENTS WITH DOXINATE AND DOXINATE WITH DANTHRON

Medication	Duration of Therapy	Number of Patients
Doxinate	8 weeks	7
	7 weeks	3
	6 weeks	5
	5 weeks	16
	4 weeks	36
	Less than 4 weeks	7
Doxinate with Danthron	During first 10 days	56
	Occasionally after 10 days:	
	1-5 days	8
	6-10 days	8
Enema or Cathartics	20-25 days	2
	During 8 weeks	0

TABLE III. TEMPORARY SIDE EFFECTS OBSERVED DURING THE TREATMENT OF CHRONIC CONSTIPATION WITH DOXINATE AND DOXINATE WITH DANTHRON

Patient Complaint	Number of Patients
Gas	19
Fullness	7
Cramps	7
Nausea	4
Headache	1

was given at least one Doxinate 60 mg. capsule per day through a period of six weeks, though a majority of the patients were having a satisfactory daily bowel movement after being treated for four or five weeks. Few patients needed any further medication after the sixth week of therapy. The use of neither enema nor harsh cathartics was required during this treatment. These data are summarized in Table II.

Results

During the first week of the therapy, we found that a certain amount of confusion existed in the minds of several patients with regard to their response to therapy. It was necessary to teach the patient that the object of treatment was a soft "normal" stool rather than a violent purgation.

During this first week of therapy, we also noticed some complaints of loose stool, gas or fullness. One patient complained of headache and a few others of cramps or nausea. The data on such side effects are presented in Table III.

Soon after the first week of treatment, the patients' response became satisfactory and, as treatment proceeded, their appreciation of the efficacy of the therapy increased. A majority of the patients were able to discontinue the use of the preparation containing Doxinate with Danthron after the first week. Beyond this period, only a few patients were given one capsule of D

ate with Danthron once every one or two weeks or even less frequently.

After four weeks of the treatment, a majority of the patients were found to be regular in their bowel habit and needed no further medication. However, Doxinate therapy was continued through a minimum period of six weeks in all the patients by giving each patient at least one Doxinate 60 mg. capsule per day. This was expected to provide a more lasting effect in the correction of the future bowel habit of the patient. Only ten patients continued to receive one Doxinate 60 mg. capsule per day during the seventh week of the treatment, and this number was further reduced to seven patients who were using Doxinate during the eighth week.

The overall satisfaction of the patients was excellent. There were no complaints of hard stools at the end of the treatment. All of the patients, except two, were very enthusiastic about the results which they had obtained from this therapy. They co-operated well in taking the prescribed therapeutic regimen. The two patients who insisted on the more frequent use of Doxinate with Danthron in order to get a more satisfactory bowel movement had previously been using cathartics or enemas through most of their adult life. They simply failed to get psychological satisfaction without a purgative effect.

As a result of the correction in bowel habit, most of the patients reported that they were feeling better, several said that they were sleeping better, and some even gained weight. One patient who had been using cathartics each day for the last nine months and was not eating well, gained 10 pounds in weight during the period of treatment.

Discussion of Cases

Several case summaries from the group are of interest.

One ambulatory patient aged twenty-three, under treatment for chronic asthma, had a long-standing complaint of severe constipation. A variety of laxatives had been used, but catharsis commonly resulted in two more prompt watery bowel movements followed by severe "rebound constipation." This patient received dioctyl sodium sulfosuccinate therapy without change in anti-asthmatic medication. The two medicaments were given at different times. He received 3 Doxinate 60 mg. capsules per day for 12 days, reducing to two capsules per day during the following 12 days and to only one capsule per day for an additional one week.

As a result the patient had one or more bowel movements daily with soft consistency of the stool. No diarrhea or side effects were present. The patient was fully satisfied with the therapy and was effectively relieved of his constipation problem.

Another patient, aged twenty-six, was receiving 50 mg. of Chlorpromazine twice daily as a tranquilizer. He had a long-standing history of constipation and had taken different types of cathartics for most of his adult life. Constipation was effectively relieved by three Doxinate 60 mg. capsules together with one Doxinate with Danthron for the first day and two Doxinate 60 mg. capsules per day for about one month.

A third patient, aged twenty-one, had a history of duodenal ulcer. He was receiving antispasmodic medication and a restricted diet. This patient complained of frequent constipation and could not tolerate cathartics. Treatment was carried out with 120 mg. of dioctyl sodium sulfosuccinate per day for a period of five weeks, administered separately from other medicaments. No side effects were present and the constipation was eliminated.

Summary and Conclusions

The therapeutic value of dioctyl sodium sulfosuccinate and its combination with 1,8-dihydroxyanthraquinone has been studied in a series of patients with chronic functional constipation. All of the patients were started on the combination therapy. In the mild and the moderate forms of chronic constipation, Danthron could be quickly withdrawn. In these cases, the subsequent use of dioctyl sodium sulfosuccinate alone was found to be quite effective in regulating the bowel habit of most of the patients. In the severe cases of chronic constipation, the occasional use of the preparation containing Danthron was continued through two to six weeks to obtain the most effective results. The need for enemas was eliminated. The fecal softening action was consistent and pronounced. No severe side effects or evidence of toxicity were seen. The patient co-operation in the acceptance of the therapeutic regimen was excellent.

This therapy did not interfere with the administration of other medicaments given at different times. The results of this study clearly indicate that the use of Danthron in combination with dioctyl sodium sulfosuccinate may be very effective when used as a withdrawal therapy in the management of the bowel habit of patients with chronic functional constipation.

(Continued on Page 1443)

Tracheotomy: Indications and Comments

G. S. Fitz-Hugh, M.D., F.A.C.S.
and W. C. McLean, M.D.
Charlottesville, Virginia

ONE of us (G.S.F.)^{4,5,6} has been interested in the various aspects of tracheotomy during the past twenty years. It has been observed that initially the procedure was performed in the vast majority of instances for the relief of obstruction in the upper respiratory tract at the laryngeal level, and that a good many (40 per cent) were performed in children two years old and younger. However, in recent years, there has been a tremendous increase in the scope and indications for tracheotomy, with more adults being the recipient of the procedure and fewer operations being performed for laryngeal obstructions. Much of the impetus to this development has been the result of the investigations and experience of Galloway,⁷ Priest,¹¹ Bower,¹ Cummings,³ and others.

We have devised a classification for the indications for tracheotomy, finding it useful in the presentation of the subject to those physicians not specifically interested in otolaryngology. Before discussing the subject further, the basic reason for tracheotomy, as far as we are concerned in this presentation, is to permit a normal exchange of air in the alveoli of the lung for the absorption of oxygen and the elimination of carbon dioxide, as so aptly stated by Harris.⁹ Any serious interference with this mechanism will result in rapid death from asphyxia; or, if corrected just prior to this catastrophe, very possibly will result in irreversible nerve or other tissue damage with death secondary to complications therefrom. If survival ensues, one may anticipate embarrassment or some compromise in the efficient function of the human mechanism. Again, repeated episodes of subclinical hypoxia may result in tissue damage which may not be recognized in its early stages.

Returning to the question of classifications, four groups or categories are to be considered (Table I).

1. First are the patients who exhibit the manifestations of an impaired airway with hypoxia due

to a more or less fixed mechanical obstructive process, such as that encountered in a neoplasm, edema of the laryngeal mucosa, or abductor paralysis of the vocal cords. The degree of obstruction to the airway is usually so severe that tracheotomy is mandatory. Little question is raised regarding the necessity of the procedure. The development of hypoxia in this group is rapid and obvious, with dramatic relief resulting from the improved airway provided by the tracheotomy. This category will not be considered further in this presentation.

TABLE I. CLASSIFICATION OF THE INDICATIONS FOR TRACHEOTOMY

- | |
|---|
| 1. Fixed Obstruction to Upper Airway (Rapid obvious hypoxia) |
| 2. Fluid Obstruction to Lower Airway (Slow obscure hypoxia and hypercapnia) |
| 3. Prophylactic (To prevent 1 and/or 2) |
| 4. Laryngeal Spasm? |

2. In the second classification are the patients in whom the airway is compromised by fluid obstructions, resulting from the accumulation of excessive material in the tracheobronchial tree, secondary to aspiration of oral secretions, inflammatory exudation, congestive transudation, or hyperfunction of the secretory elements from any other causes. It is in this group that the development of dangerous hypoxia and asphyxia may be very slow, insidious and deceiving. Also, it is in this group that the presence of a normally functioning cough reflex and medullary respiratory center are essential. Further comments in regard to this will be forthcoming, as we are most interested in this class of patients in this presentation. The indications are not as clearly defined here as in the other categories, and more judgment must be demonstrated in deciding upon the need for tracheotomy.

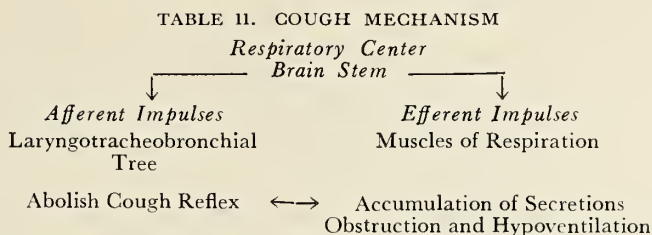
3. The third group comprises those cases in which it is believed that the airway will be compromised by the conditions cited in indications one and two. Anticipating much difficulty, tracheo-

From the Department of Otolaryngology, University of Virginia Hospital, Charlottesville, Virginia.

Presented at the 91st Annual Session of the Michigan State Medical Society, Detroit, September 27, 1956.

tomy is performed as a preventative measure. An example would be a case of extensive surgery upon the head and neck for neoplasm. As in category one, no further comment will be made in this presentation in regard to this prophylactic group.

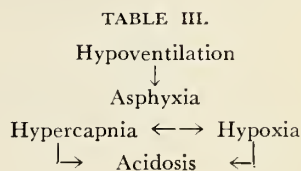
intercostal, and abdominal muscles responsible for the positive action of the reflex (Table II). The circuit may be interrupted at any one or more points along its pathways. For example, the medullary respiratory center may be so depressed by



4. A fourth group and one which the existence thereof is questionable, will just be mentioned. Conceivably, tracheotomy may be necessary in the case of laryngeal spasm *per se*. We believe we have seen this in only one instance: a twelve-year-old girl with tetanus. We do know that in spasm superimposed upon an abnormal larynx as the result of inflammatory edema, neoplasm or such, tracheotomy has been necessary and usually with some degree of urgency.

So much for classification. As has been mentioned, in this presentation, we are interested in tracheotomy's being utilized for the second category of patients. It is in this group that there has been a noticeable increase in the incidence of tracheotomy, due to the realization of the benefits derived from this approach to cleansing the tracheobronchial tree of obstructing materials.

The need for tracheotomy in preventing local pulmonary and generalized systemic complications is predicated upon the failure of the cough reflex.¹⁴ Any interruption in the proper function of this reflex is followed by an accumulation of secretions or other types of fluid material in the lower respiratory tract which, in turn, will lead to certain well-recognized local pulmonary and many less well-recognized complex systemic changes in the human mechanism. The cough reflex is mainly responsible for the elimination of fluids accumulated in excess in the laryngotracheobronchial tree, although movement of secretions by ciliary action plays a significant part. Sensory impulses of the reflex from the larynx, trachea, and lung, are transmitted by the vagus nerves to the co-ordinating medullary respiratory center, from whence the motor impulses are relayed to the relevant laryngeal, diaphragmatic, pulmonary,



disease or even by excess CO₂ that it can no longer respond to the nerve impulses or to CO₂ stimulation. The muscles and nerves of the reflex may be rendered non-functional by trauma or disease. Once the patient is unable to cough efficiently, then one may expect an accumulation of nasal, oral, and pulmonary secretions with resulting deleterious pulmonary and systemic changes.

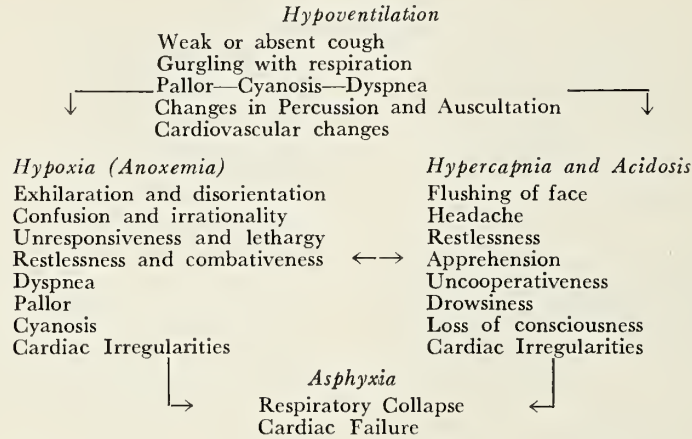
Obstruction of the tracheobronchial tree by secretory or foreign material, such as regurgitated food, predisposes to edema of the mucous membranes, further obstruction, atelectasis, infection secondary to stasis, and finally, to frank suppuration such as pulmonary abscesses. These are the readily recognized local conditions which may develop. There is another systemic condition which is related to the physiology of respiration.^{2,8} With tracheobronchial obstruction, normal ventilation is impaired. Impairment in ventilation is initially mechanical in type. Inspired air does not adequately reach the alveoli; thus, sufficient oxygen does not reach the alveoli to pass into the blood by diffusion and, in turn, carbon dioxide present in blood is not adequately expired. This inadequacy leads to oxygen want or hypoxia, carbon dioxide retention or hypercapnia, then respiratory acidosis, and later, metabolic acidosis or acidemia. The combination of hypoxia, hypercapnia, and acidosis will lead to asphyxia (Table III).

The symptoms and signs of hypoxia and hyper-

capnia will be emphasized, for they may well be ascribed to, and confused with, the primary disease which has created the problem. Those of hypoxia are mental disturbances, which may be exhilaration, confusion, disorientation, irritation-

an oral or nasopharyngeal tube, and direct aspiration through an endotracheal tube or bronchoscope are methods which have been successfully utilized at times. However, when it is apparent that these measures will not suffice or be appli-

TABLE IV. SYMPTOMS AND SIGNS



ality, unresponsiveness, lethargy, and coma. Signs are restlessness, combativeness, dyspnea, pallor, cyanosis, and cardiovascular irregularities.

The symptoms and signs of hypercapnia and acidosis are much the same as those of hypoxia. Flushing of the face, headache, restlessness, uncooperativeness, apprehension, drowsiness, loss of consciousness and abnormal cardiac action are indicative of this carbon dioxide retention. Asphyxia with cardio-respiratory collapse is all too obvious, and is irreversible.

The need for the relief of obstruction of the type in the second category is determined better by clinical observations than by any laboratory means, though carbon dioxide combining power determinations may be helpful. The clinical symptoms and signs are decreased to absent cough reflex, audible gurgling sounds with respiration, changes on auscultation and percussion, and radiologic evidence of atelectasis (Table IV).

Once it becomes reasonably certain that a patient has an excessive accumulation of fluid in the tracheobronchial tree, what may be done to correct the situation? It is certain that in many patients, the fluid obstruction may be satisfactorily removed by means other than aspiration through a tracheotomy. Encouraging the patient to cough, elevation of the foot of the bed 15 degrees, constant or intermittent aspiration through

cable for reasons such as lack of skilled nursing attention, various muscle paralyses, and interference with patient rest, then tracheotomy should be performed without undue delay and should be, technically, an orderly elective procedure in this group of patients.

The advantages of tracheotomy are that (1) fluid aspirated or collected in the tracheobronchial tree may be readily and efficiently removed by aspiration through the tube; (2) the pharynx and its secretions are by-passed and thus eliminated as a cause of obstruction; (3) the upper respiratory areas of obstruction are removed; (4) the tube itself acts as a partial mechanical barrier to the aspiration of material from above its site; (5) less skilled nursing care is required, and (6) the improved airway allays apprehension.

Disadvantages of tracheotomy are: (1) an already ill patient is subjected to added strain resulting from the operative procedure; (2) the risk of complications such as wound infection, hemorrhage, pneumothorax, pneumomediastinum, tracheal stenosis; (3) obstruction to the flow of air offered mechanically by the tube; (4) respirator care, if one is being used or will be needed, is made more difficult (Table V).

The advantages and disadvantages of tracheotomy which are mentioned are presented in part in a brochure published by The National Foundation of Infantile Paralysis.¹⁰

TABLE V. TRACHEOTOMY

Advantages	Disadvantages
1. Provides efficient route for the aspiration of obstructing secretions.	1. Subjects an ill patient to an operative procedure.
2. Allays apprehension	2. Risks of complications, e.g., infections, hemorrhage, tracheal stenosis, pneumothorax.
3. Pharynx and pharyngeal secretions by-passed and eliminated as a cause of obstruction.	3. Tube obstructs flow of air.
4. Eliminates areas of obstruction of upper air passages.	4. Respirator care more difficult.
5. The tube itself mechanically acts as a partial barrier to the aspiration of material from above.	
5. Less skilled attention necessary.	

TABLE VI. INDICATIONS FOR TRACHEOTOMY IN VARIOUS CATEGORIES

Series in Years	1930-1940 (10-year period)	1943-1953 (10-year period)	1954-1956 (2-year period)
No. Patients	102	150	110
Category 1			
Laryngeal Obstruction	65%	53%	29%
Category 2	30%*		
Tracheobronchial Obstruction	(Approx.)	20%	54%
Category 3	5%*		
Prophylactic	(Approx.)	27%	16%
Category 4			
Laryngeal Spasm	0%	0%	1%

*In the first series, the present classification was not utilized; however, the figures are essentially accurate.

It is our opinion that, when needed, the advantages of tracheotomy over the disadvantages are so great that one need give the latter little consideration. Complications and risks of tracheotomy even when performed by physicians with little surgical experience, are so rare and of so little consequence that they should be given small thought in making the decision to perform the procedure. Complications are greater, but still usually of little consequence, in the cases in which operation is performed for obstruction at the aryngal level, some of these being disorderly emergency operations.

In our study of more than 300 tracheotomies performed under all types of conditions and upon all kinds of patients, we have found three examples in which a complication of the procedure *per se* could be considered contributory to the death of the patient. All were in the earlier group, there being none in the last 250 patients. Two were the result of secondary tracheal erosion and hemorrhage, due to an ill-fitting cannula; and the third, to a bilateral tension pneumothorax. These were in young children. Occasionally, a case of tracheal stenosis was seen resulting from high tracheotomy performed elsewhere as an emergency procedure in an infant. The stenoses were subsequently successfully treated. We have often seen light wound infection, mediastinal emphysema,

and pneumothorax, none causing any real concern.

Tracheotomy in the second category has been employed in a large and variable number of illnesses. Our list includes poliomyelitis, cardiac arrest, brain tumors, amyotrophic lateral sclerosis, Gullian-Barre syndrome, meningitis, tetanus, uremia, pneumonia, neoplasms, cerebrovascular accidents, various types of trauma, to facilitate the administration of anesthesia, and others. Tracheotomy as an aid in the treatment of leprosy, eclampsia, and other conditions has been recorded in the literature.¹³ We agree with Putney¹² that while the question of its necessity in such numerous and varied incidents may be open to more critical considerations, it has undoubtedly proved to be the difference between life and death in many cases.

The only contraindication to tracheotomy in the second category group, that has occurred to us, is in the case of pulmonary edema secondary to cardiac failure. Tracheotomy as a route for the successful removal of secretion may well be of no avail and, in fact, may be harmful. The proper treatment is the belief of the decompensation and pulmonary fluid by digitalization and other non-surgical means.

Some comment should be made in regard to the use of oxygen in the treatment of the group

of patients in which ventilation is inadequate for various reasons.^{2,8} Administered oxygen which reaches the alveoli level will certainly aid in the relief of arterial hypoxia. The replacement of oxygen deficiency in the tissues will alleviate metabolic acidosis and strengthen the respiratory center. However, oxygen *per se* will do nothing to relieve carbon dioxide retention and respiratory acidosis, nor will it prevent pulmonary disease secondary to stasis and infection. The arterial blood can be well oxygenated despite severe hypoventilation if high concentrations of oxygen are inspired; however, carbon dioxide cannot be eliminated properly without an adequate volume of alveolar ventilation.

Table VI contains data in regard to the indications for tracheotomy in the various categories. From the figures in Table VI, one can observe a relative decrease in the number of tracheotomies for laryngeal obstruction—the category for which the procedure was originally devised many centuries ago—and an increase in the use of the procedure for other reasons. This has resulted from a better knowledge of the physiology of respiration and the methods of correcting diseased conditions responsible for any deviation from normal pulmonary ventilation.

The increase in the numbers in the second and third categories is due in part to the performance of more radical and extensive surgery about the head and neck in an effort to control carcinoma, and also to increased trauma sustained by the head, neck, and chest as the result of highway automobile accidents.

Another observation of interest to us was that in the 1940 series, it was necessary to examine records over a period of approximately ten years to obtain 102 cases of tracheotomy; in the 1953 series, also approximately ten years were necessary for the 150 cases; but in the 1956 series, a total of 110 patients had tracheotomies in a period of two years. It is true that in the last twenty-odd years there has been a gradual increase in the number of admissions to the University of Virginia Hospital, but not nearly enough to be a major influence in the statistics cited. It is obvious that many more tracheotomies have been performed in recent years upon essentially the same type and number of patients. Also, it should be mentioned that our poliomyelitis service has been a very small one, and this disease has been responsible for a very few tracheotomies in comparison

to the number in other institutions having large respiratory centers treating this disease.

The recent increase in the number of tracheotomies performed, particularly in our hospital, has raised the question in our minds (as, apparently, also in Putney's¹²) of its real necessity in such a numerous and varied list of patients. At the present time, the indications for tracheotomy for the individual patient are being scrutinized carefully and possibly will result in a decrease in the number of procedures. However, it must be kept in mind that the discomfort, complications from, and disadvantages of tracheotomy are so negligible that in case of doubt, the procedure should be favored.

Another matter of interest to us, and one on which we have no definite figures at the present, is the apparent lack of utilization of tracheotomy, except in the first category, in the smaller hospitals in our state which have less well-developed intern and resident staffs. Perhaps in the smaller community hospitals, encouragement in use of the procedure may result in the salvage of some lives.

Summary

Observations are made in regard to the changes in the indications and increase in the incidence of tracheotomy. Emphasis is placed upon the value of tracheotomy as a route by which the lower tracheobronchial airway may be kept free of obstructing fluids in patients whose cough reflex is impaired for various reasons. The symptoms signs, and deleterious effects of hypoxia and hypercapnia are stressed. Advantages, disadvantages and the insignificance of complications of the procedure are briefly considered. Its employment may be abused, but when indicated, it may be a method of saving lives even in the nonemergent group of patients suffering with low grade, difficult-to-recognize, tracheobronchial obstruction preventing satisfactory pulmonary ventilation.

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(Continued on Page 1443)

Study Discloses Public and Doctor Opinion— MSMS House of Delegates Recommends Changes in Blue Shield

ACTION—Part One

(See page 1406)

The 1957 House of Delegates of the Michigan State Medical Society, meeting in Grand Rapids, September 23, 24, and in special session September 25, unanimously approved Reference Committee recommendations for sweeping changes in Michigan Medical Service (Blue Shield).

The House of Delegates Reference Committee on Medical Service and Prepayment Insurance, chaired by Max L. Lichter, M.D., gave long hours of consideration to reports of the Committee on Michigan Medical Service, George W. Slagle, M.D., chairman, the Committee to Study Comprehensive Prepaid Insurance Plans, C. I. Owen, M.D., chairman, and the Survey Committee, D. Bruce Wiley, M.D., chairman. The amended Slagle Report, as approved by the Delegates, is herein reported, as the culmination of the House action on this important question.

SUPPORT—Part Two

(See pages 1408 and 1411-1436)

Pointing the way for Blue Shield changes were the results of the statewide Opinion Study of Prepaid Medical Care Coverage in Michigan, sponsored by the Michigan State Medical Society. The study was directed by the Delegates meeting in special session April 27 in Detroit.

Five months later, the four separate surveys of public and doctor opinion were presented to the House of Delegates in Grand Rapids by J. J. Lightbody, M.D., vice-speaker; George W. Slagle, M.D., president-elect, and Hugh W. Brenneman, survey director.

The study results commanded nationwide attention, and nearly 100 representatives of state medical societies, insurance companies and the press attended the Annual Session of the House of Delegates.

A copy of the 240-page study was distributed to delegates in Grand Rapids to aid them in their deliberations. In reproducing the study for this issue of *The Journal*, statistical tables have been omitted. A very limited number of copies of the full-published study report are available from the MSMS office,

ACTION

Report of the Reference Committee on the Report of the Survey Committee

The report of the Survey Committee was received by your Reference Committee. In considering this report the committee was aware of the great national interest evoked by the survey. Present were representatives from many state medical societies throughout the country, the insurance industry, associations concerned with health services, editors from state medical journals and national medical journals, and members of the press. In addition, numerous requests are being received from a variety of interested organizations.

The Committee was impressed with the extent of the study and the thoroughness with which it was conducted. The Committee strongly urges the utilization of the data of this admirable survey by all those concerned with the subject of prepaid medical care insurance.

Your reference committee highly commends the Survey Committee for an assignment well done. Particular commendation is due the survey director, Mr. Hugh W. Brenneman, our esteemed public relations counsel, for his unflagging zeal in organizing this monumental effort, his leadership which earned the untiring cooperation of his staff, and his meticulous attention to myriad of detail—and still completing the task on time.

The Committee wishes also to express its high-

est commendation to those who worked with Mr. Brenneman in this study:

To L. Fernald Foster, M.D., MSMS Secretary, and Mr. William J. Burns, MSMS Executive Director, who with Consultant David J. Luck, Director of the Bureau of Business Research of Michigan State University and Richard B. Oudersluys, Director of the Market-Opinion Research Company, supported and wisely counseled.

To Warren F. Tryloff, Associate Director of the Study and Dick Philleo, Supervisor of Production, who at great personal sacrifice devoted their recognized talents unceasingly to the successful execution of the study.

To John B. Kantner of the Michigan Health Council who so ably wrote, and advised upon the preparation of the report, as well as the attendant publicity, in cooperation with Miss Kay Asby, a devoted and competent special survey assistant.

To Jack Pardee, Miss Jean MacDonald, Miss Vada Studt, Miss Helen Schulte and to the MSMS stenographic staff who sincerely contributed with their interest and time to the production of the materials upon which the survey depended.

And to Artist Dirk Gringhuis whose advice and assistance aided the publicity and was responsible for the fine appearance of the report.

Report of the Reference Committee on the Report of the Committee on Michigan Medical Service

A. GENERAL CONSIDERATIONS

The Michigan State Medical Society has made an intensive study of the development and the operation of the many means currently employed both in Michigan and elsewhere to insure against, or to prepay, the cost of medical care. The conclusions resulting from that study are set forth below and are based upon the following fundamental considerations:

1. The people of Michigan are entitled to and should have health care which meets the highest standards attainable.

2. Means generally should be available in Michigan which will permit the financing of the costs of necessary medical services and supplies to the greatest extent possible and practicable through prepayment.

3. To whatever extent the cost of a particular medical service is not covered by prepayment, such uncovered amount shall be predictable, be known to the patient in advance, and be within his ability to budget out of income.

The foregoing can be accomplished only if those responsible for rendering the necessary medical services, namely the physicians of Michigan, assume the further responsibility of establishing within the profession a structure around which sound insurance or prepayment plans can be built and also a system by which the profession can assure itself, the prepayment-plan subscribers, and the underwriters that the structure is functioning in accordance with its commitments.

B. COMMITMENTS BY THE MICHIGAN STATE MEDICAL SOCIETY

In light of the foregoing, the Michigan State Medical Society undertakes the following commitments.

1. Any contract offered by an insurance carrier or prepayment plan organization which embodies the principles set forth in Section C herein shall receive the endorsement of the Society, provided the carrier issuing this contract shall stipulate it will not offer any prepaid medical care contract which is preferential or discriminatory in its rating. This endorsement shall remain in effect as long as the carrier continues to make such contracts available and keeps the stipulation in effect.

2. It being the objective of the medical profession to make certain that voluntary health protection be available to all self-sustaining people at reasonable cost, the endorsement of the Michigan State Medical Society will be given only if rates charged by the insurance or prepayment carrier are fair and equitable and non-discriminatory.

3. The Society will use its best efforts to secure the participation of its members in all contracts endorsed by the Society.

4. A subscriber rendered care by a participating physician will receive "service benefits" as provided in his contract, the basis set forth in Section D, below.

5. The Council of the Michigan State Medical Society will appoint a Medical Care Insurance Committee having the following functions:

- (a) To examine all contracts submitted for endorsement. A report will be sent to The Council which will have the authority to issue a certificate of endorsement on behalf of the Society.
- (b) To cooperate with the Permanent Advisory Committee on Fees of the House of Delegates concerning the Relative Value Scale and applicable unit values.
- (c) To develop review procedures for any matters concerning the subscriber, the physician, the insurance carrier, and others.
- (d) To develop review committees in each of the Councilor Districts of the Society, nominated locally, which shall be appointed by The Council of the Michigan State Medical Society. These shall function under the direction of the Medical Care Insurance Committee, which will also serve as a unit to which appeal can be made from decisions of the review committee(s).
- (e) To make such interpretations of the language herein as may be required in connection with the endorsement of contracts.

6. Amendments to, or interpretations of, the principles set forth herein may be made by The Council of the Michigan State Medical Society

during the interim, between meetings of the House of Delegates of the Michigan State Medical Society.

7. The Michigan State Medical Society, sponsor of Michigan Medical Service, will urge Michigan Medical Service to make available, to any qualified group or individual, protection in accordance with the principles herein set forth, at fair and equitable rates, and pledges its support in such an endeavor.

C. PRINCIPLES TO BE EMBODIED IN INSURANCE CONTRACTS

1. There must be complete freedom of choice of physician by the patient. Nothing in any contract will imply any restriction of this principle.

2. All benefits will be on a service basis consistent with the principles set forth in Section D, except when a subscriber voluntarily occupies a private room in a hospital.

3. The following services must be included in any basic program:

- (a) Surgical procedures wherever performed.
- (b) Medical services when the patient is confined to a hospital.
- (c) Consultation service in the hospital; surgical assistants where required.
- (d) Obstetrical services for the actual procedure in normal delivery, Cesarean section, or abortion and complications of pregnancy, but not to include routine prenatal and postnatal care. Optional supplemental insurance by the carrier to cover all obstetrical costs may be offered as provided in Item 4, immediately below.
- (e) Anesthesia by a physician, not an employee of a hospital.
- (f) Diagnostic laboratory procedures shall be provided in the out-patient department of a hospital, a private laboratory, in the physician's office (screening procedures are excluded).
- (g) Diagnostic and therapeutic radiologic procedures shall be provided in the hospital, the out-patient department, or in the physician's office.

4. At the option of the carrier, additional coverage may be provided for other medical services and supplies such as:

- (a) Home and office calls.
- (b) Benefits for prescriptions filled by a registered pharmacist.
- (c) The furnishing of prosthetic devices.
- (d) Physiotherapy in the out-patient department or the physician's office.
- (e) Other services which may be required in the treatment of the patient.

5. (a) For any necessary service other than in-hospital medical care, surgical care, obstetrical care and anesthesia, the subscriber shall have, at the time of utilization, a degree

of financial participation in, and responsibility for, medical fees in addition to his premium. This shall be determined by the carrier but the responsibility of the patient shall be not less than 10 per cent or \$5.00, whichever is more, but not in excess of the scheduled fee allowance. In accordance with the terms of the contract, this amount shall become the obligation of the patient to the physician at the time of service and will be subtracted by the carrier from the payment for service it shall make to the physician. For any calendar year, however, patient participation shall not exceed the following:

Contract for which Eligible	Limit of Patient Participation Per Year
A	\$25
B	50
C	75

- (b) While the provisions of (a) above are strongly urged by the Michigan State Medical Society, any carrier may have the option to waive the provision of (a) by a rider to provide for coverage without subscriber contribution.

6. There shall be three contracts to be known as Plans A, B, C. Each of these contracts shall apply to a specific income level and will provide service benefits. The income level shall be determined by a projection of the current rate of earnings of the basic wage-earner in the family and not by family income.

Where the basic income is not readily determined and established (such as self-employed, farmers, salesmen on commission) the Committee on Medical Care Insurance of the Michigan State Medical Society shall develop appropriate criteria for determining eligibility for service benefits.

- (a) Plan A will provide full service benefits for those subscribers whose basic income is less than \$2,500.
- (b) Plan B will provide full service benefits for those subscribers whose basic income is at least \$2,500 but less than \$5,000.
- (c) Plan C will provide full service benefits for those subscribers whose basic income is at least \$5,000 but less than \$7,500.

Those subscribers whose income is in excess of \$7,500 may purchase only Plan C. In this event, the total fee shall be the result of agreement between the patient and his physician. The plan

will pay the applicable "dollar allowance" to the physician.

7. The insurance carrier shall be responsible for classification of subscribers and appropriate designation of the plan in which they must be enrolled. Income designation shall reflect the subscriber's current rate of pay, projected on an annual basis. This designation shall be reviewed annually and changed as indicated by the review.

D. BASIS OF SERVICE BENEFITS

1. The Michigan State Medical Society will develop a "relative Value Scale" which will assign to the individual surgical, obstetrical, and other medical services a value in units proportional to the relative value of that service. The Society will determine the applicable value of one unit for each class of benefit. By multiplying the number of units assigned to a procedure by the value of one unit, the "dollar allowance" for that procedure is obtained.

- 2. (a) The Michigan State Medical Society will establish unit values for medical, surgical and obstetrical procedures and anesthesia for each of the plans.
- (b) For diagnostic laboratory procedures and for all radiologic procedures, the unit value will be the same for all plans.
- (c) For any optional benefits offered by a carrier, the Society will establish appropriate unit values.

3. Until the Michigan State Medical Society establishes a Relative Value Scale, the scale developed by the California Medical Association shall be used.

4. No participating physician may charge more for a particular service rendered a subscriber than the "dollar allowance" payable for that service under the subscriber's contract. A subscriber covered by Plan C, whose income is designated as in excess of \$7,500, however, shall be responsible for any part of fees to which he agrees with his physician, in excess of the applicable "dollar allowance."

Respectfully submitted,
Max L. Lichter, M.D., *Chairman*
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SUPPORT

The Opinion Study of Prepaid Medical Care Coverage in Michigan was published and distributed to the Delegates in Grand Rapids. The 240-page volume contained detailed tables of statistics. In reprinting sections of the Study for JMSMS, only the statistical tables have been omitted.

Official Report of the Opinion Study of Prepaid Medical Care Coverage in Michigan

MICHIGAN STATE MEDICAL SOCIETY
606 Townsend Street, Lansing, Michigan

Sunday, September 22, 1957

Kenneth H. Johnson, M.D., Speaker
House of Delegates
Michigan State Medical Society

Dear Doctor Johnson:

On April 27, 1957, the House of Delegates instructed that the attitude of the public and its various components be obtained on the general subject of prepaid medical care and problems related thereto. The Council of the Michigan State Medical Society embarked on May 15 upon this assignment by initiating the "Opinion Study of Prepaid Medical Care Coverage in Michigan."

The responsibility for the conduct of this opinion study was vested in the Executive Committee of the Council, which became the Survey Committee.

The Study sought opinions and information regarding medical care coverage from four sources: (1) The consumers of medical service—a selected sample of the public queried through personal interview; (2) a broader selected public reached by the mailed questionnaire; (3) the doctors of medicine as the purveyors of medical care; and (4) available research material on the overall question.

By action of The Council this day, September 22, 1957, the report of the Michigan State Medical Society Opinion Study of Prepaid Medical Care Coverage in Michigan was approved in its entirety and is submitted to you with the intent and hope that the information will be of value in consideration, by the MSMS House of Delegates, of the weighty problems that face our Society's policy-making body. We have confidence in your wisdom and judgment.

Respectfully submitted,
D. Bruce Wiley, M.D.
Chairman of The Council

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Acknowledgments

AN OPINION STUDY OF PREPAID MEDICAL CARE COVERAGE IN MICHIGAN

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Survey of Consumer Opinion on Medical Care Protection

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* * *

It is difficult to acknowledge formally all of those who contributed to this study. But to the many persons, in addition to those above, who helped by giving their time, advice and encouragement, we express our grateful appreciation. Special thanks are expressed to the *Detroit Sunday Times* and *Lansing State Journal* newspapers for the sincere interest in this study and their help in getting reader participation in the survey by printing it in full, so it could be filled out and returned for tabulation.

The Market Opinion Research Company of Detroit accepted and carried out the responsibility for conducting the Opinion Survey of Prepaid Medical Care Coverage and Related Costs.

Introduction to Study

Prosperity was general in the year 1957. People were working and making money and jobs were plentiful. Yet, because of inflation, people were sometimes hard put to make ends meet.

Although the costs of all products and services were increasing, one of the most galling bills to pay was the doctor's bill.

While, realistically, people accepted the fact that their doctor was a highly trained, skilled scientist, they did not fully appreciate the rapid advances in his science. Many scientific changes, such as the administration of anesthesia, for example, offered greater protection to the patient, but, sadly enough, they cost him more money when he went to a hospital for an operation. The new drugs lessened the patient's stay in bed and got him back to work sooner, but it was more painful to pay for the prescription.

There were other changes taking place, too—socio-economic changes in which people in 1957 sought and expected greater security in the financial returns from their jobs. Fringe benefits became the accepted and demanded right of the individual.

So they came to expect it.

But nothing is free. The economic facts of life still continued to operate. Costs continued to rise, and the medical insurance plan which fitted the financial structure of the forties was an economic lag in the fifties. The doctors realized it and began to make a careful appraisal of these plans to see where changes could be made.

It was about that time that the labor unions saw an opportunity for a new approach in fertile fringe benefit territory. Whenever they demanded higher wages, the higher wages merely increased the cost of the products and added to the spiralling inflationary process. That left the worker with little net gain in the value of his take-home pay. So labor turned its attention to the sociological programs in which health insurance plans were one of the most important to union members. Labor talked of increases in benefits which would lead to full medical coverage in such programs as the Blue Shield plan operated by the doctors of medicine, and they threatened to start their own medical plan if the doctors did not accede.

It was in this climate of social and economic change that the Michigan State Medical Society's Opinion Study of Prepaid Medical Care Coverage in Michigan was born.

Changes had to be made in medical care plans and surgical insurance protection. Since the medical profession and the public are partners in these plans, it was felt that both should have an opportunity to express their views about what

medical-surgical services should be offered.

The Michigan State Medical Society House of Delegates met in Special Session in Detroit on April 27, 1957 to consider the necessity of changes in the Blue Shield Plan. After careful deliberations, they passed the following motion:

That to complement better the work of present committees, the Michigan State Medical Society Council or its Executive Committee be instructed to immediately conduct a survey to determine the attitude of the consumer public generally regarding services which should be offered, as well as the economic potential to pay for such services, and that it utilize any survey material and information already available together with such other facts as can be secured to effect that end, this survey information to be made available to this House of Delegates at the September, 1957, meeting through the Annual Report of the Council of the Michigan State Medical Society.

In other words, members of the House of Delegates authorized a Study which would find out four things—

1. What medical services do people want covered by medical prepayment plans, and what do they feel is the order of priority for these services?
2. How much will people be willing to budget for these services, and which of the services are they most willing to pay for?
3. What do doctors want from any prepaid medical or health insurance plan?
4. What data is available from other surveys conducted throughout the United States recently on the same questions?

The project was given the title, "An Opinion Study of Prepaid Medical Care Coverage in Michigan." The Survey Committee of the Michigan State Medical Society accepted responsibility for the Study. Members of the Committee were actually members of the Executive Committee of the Council of MSMS. The Michigan Health Council, a non-profit educational organization, cooperated with the Michigan State Medical Society in conducting a portion of the total Study.

The entire study was unique in many ways. For one thing, it was operated on a fast-moving time schedule. Usually a comprehensive study of this nature would take several years to complete. From the decision to report of the results, this one was finished in only five months. The speed was an essential part of the study's accuracy.

The study was unusual in another way, in that an extensive publicity campaign was carried out all the time the project was in the works, including radio, television, and press coverage. As a rule, there is little publicity on a survey until the results are announced. In this case, however, much attention was given the Study so that there would be a maximum return of the questionnaires.

Many hours of work have gone into the preparation of this comprehensive report. The members of the Michigan State Medical Society undertook this project as a public service to the people of Michigan and the nation. It is hoped that the vital information contained in the pages that follow will be of use to insurance companies, health

insurance advisory groups, other state medical societies and Blue Shield plans.

The people have spoken. Inevitably their thoughts and opinions will have a significant effect on the course and direction of future medical insurance programs.

Methodology

The Opinion Study on Prepaid Medical Care Coverage in Michigan consisted of four separate but integrated surveys—

- Opinion Survey on Prepaid Medical Care Coverage and Related Cost
- The Survey of Consumer Opinion on Medical Care Protection
- The Survey of Doctor Opinion on Prepaid Medical Care Plans
- The Survey of Related Studies on Prepayment of Medical Costs.

Information from the first three surveys listed above was recorded on IBM cards and tabulated by the Service Bureau Corporation on IBM machines.

OPINION SURVEY ON PREPAID MEDICAL CARE COVERAGE AND RELATED COST

The Medical Care Coverage and Related Cost Survey consisted of 1,000 personal interviews conducted by the Market-Opinion Research Company of Detroit. Forty per cent of the sample was selected from eighty-five census tracts in Wayne County. The balance of the sample was taken from twelve out-state counties—Allegan, Berrien, Calhoun, Chippewa, Grand Traverse, Ingham, Kalamazoo, Kent, Lenawee, Saginaw, St. Clair, and Oakland.

This is how the census tract selection was made for the interviews. Census tracts are numbered. The first tract was selected at random, then every sixth tract was chosen as an interview location. A block was chosen at random in each tract and four interviews were conducted per block. In larger census tracts, two blocks were chosen. A total of 100 blocks were used in the Survey.

When no census tract was available for the sample selection, the "quota control method" was used. In this method, the interviewers have quotas of respondents which represent population characteristics such as rural, urban, occupational, age and racial classifications. Quotas are in proportion to the population and number of population characteristics in each county.

SURVEY OF CONSUMER OPINION ON MEDICAL CARE PROTECTION

The Survey of Consumer Opinion on Medical Care Protection was a mail survey conducted by the Michigan Health Council. The names of persons to receive the questionnaires were selected from the 1957 Michigan automobile registrations. This is a more recent and complete listing than that provided by the 1950 U. S. Census Bureau. In addition, approximately 80 per cent of the names on the list are men. Since this survey was directed toward men who actually purchase about 80 per cent of the medical insurance contracts through their places of employment, the proportion of men on the automobile listing made it an ideal source of names.

Questionnaires were allotted each county according to its percentage of population to the entire state as indicated in U. S. Census figures. Lansing, with its diversified representation of income, occupation, and age groups was designated as the test city. Returns from Lansing compared favorably with early returns from throughout the state.

To give the survey the widest distribution possible, questionnaires were published in full by the *Detroit Times* and the *Lansing State Journal*. A total of 308 persons responded.

In a special effort to get the questionnaire directly into the hands of people who work in Michigan industries, municipal governments, merchandising and sales organizations or trade associations, personal letters were written to employers, with a copy of the questionnaire enclosed. The employers were asked to spread the word in their publications and request additional copies of the questionnaire for wide distribution among their workers. Approximately 12,800 were sent in answer to requests and 859 or 6.7 per cent were returned.

The Michigan Health Council mailed 40,162 questionnaires and 39,380 were delivered. The return was 4,702 or 11.9 per cent.

The Michigan State Medical Society mailed 6,340 questionnaires to its members, and 6,328 were delivered. The return was 1,878 or 29.7 per cent. The Michigan Health Council also mailed 10,000 to the Lansing area with a delivery of 9,461. The return was 1,066 or 11.3 per cent.

Total returns on the Survey of Consumer Opinion on Medical Care Protection, including request and newspaper distribution, amounted to 8,813.

The 1,878 questionnaires returned by the medical profession were not tabulated with those returned by the general public because answers from this special occupational group would bias the survey. However, these questionnaires will be tabulated and used in subsequent studies. Thus, by subtracting the 1,878 responses from the total returns, the adjusted total returns would be 6,934.

SURVEY OF DOCTOR OPINION ON PREPAID MEDICAL CARE PLANS

The Survey of Doctor Opinion on Prepaid Medical Care Plans was a mail questionnaire sent to Michigan State Medical Society members along with the Survey of Consumer Opinion on Medical Care Protection. The number sent was 6,340 and 6,328 were delivered. The return was 2,435 or 38.5 per cent.

The total number of returns for all three surveys was 12,248. The mailings and personal interviews took place in July, 1957. The cut-off date for returns on all public-opinion questionnaires was July 31. The cut-off date for returns on the Doctor Opinion questionnaire was August 17.

Recording and tabulation began with the return of the first questionnaire. The "write-in" answers were coded so that these answers could be incorporated with the other pre-coded answers on the balance of the questionnaire. These, in turn, were punched, tabulated, and sorted by the Service Bureau Corporation, a subsidiary of the International Business Machine Corporation. IBM heavy production equipment was used in handling the millions of factors involved.

SURVEY OF RELATED STUDIES ON PROTECTION AGAINST MEDICAL SERVICE NEEDS

The Survey of Related Studies on Protection Against Medical Service Needs was developed by reviewing and compiling twelve surveys made in other parts of the United States on the same basic question. These were the only surveys previously made.

The six surveys selected for report include—

- *Summary of Survey of Physician's Attitudes Toward Voluntary Health Insurance*, American Medical Association, Council on Medical Service, January, 1954
- *Attitudes Toward Health Insurance*, Social Research, Inc., 1956
- *Reactions of People in Two Harbors to Different Plans of Paying for Medical Care*, Department of Rural Sociology, University of Minnesota, 1956
- *Report of Committee to Study Comprehensive Prepaid Insurance Plans*, Michigan State Medical Society, 1957
- *Family Medical Costs and Voluntary Health Insurance: A Nationwide Survey*, Health Information Foundation, 1956
- *Voluntary Health Insurance in Two Cities*, A survey of Subscriber Households, Health Information Foundation, 1957
- *Charts and Graphs: A Supplement to Voluntary Prepayment Medical Benefit Plans*, Council on Medical Service, American Medical Association, 1957.

Conclusions

THE OPINION STUDY OF PREPAID MEDICAL CARE COVERAGE IN MICHIGAN AS REPORTED IN THIS DOCUMENT IS A VALID ONE

It has been checked against statistical facts available from other recognized sources and found to be within the tolerances of accuracy.

The separate surveys of the study, although accomplished independently and using different samples, agree in every basic category of study. Even in details where minor differences are noted, the trends and their implications are alike.

The desires of the sponsors of this survey, as reviewed elsewhere in this report, have to a major degree been met. The sponsors at no time expressed a desire for anything except the most unbiased information. In every instance where bias might have been possible, extra precaution was taken to avoid it insofar as it is humanly possible

under the accepted standards of survey procedures.

The timetable of the survey was unusually rapid. This increased the expense, at the same time improving the accuracy and eliminating possibility of an organized campaign by any person or group to bias the answers received.

The public took a great interest in the survey, as is evidenced by the unusually high ratio of return of mailed questionnaires. The interviewers received an unexpectedly sincere welcome from those interviewed and were given thoughtful replies. Interest in the survey reflects interest in the question. Cooperation of the public was also reflected by the generous help and attention given the survey by the various media of communication. Few previous surveys on any subject have received comparable publicity prior to the release of their findings.

The present value of this study is that it supplies a true reflection of the desires and attitudes of both the surveyors and consumers of medical care in Michigan which cannot be fairly questioned or distorted and upon which decisions affecting the lives of millions of persons can be reliably based.

The attitudes delineated herein may change, but this survey will continue to have value in the future as a bench mark. For, as of this date, the people have spoken and their voice is accurately reported. Literally millions of facts are available from such an extensive survey as this.

The Survey Committee does not pretend to be omnipotent in foreseeing that answers to all questions asked by any person, which can be obtained from the statistics, are herein reported. However, the conclusions and highlights arrived at are, in the opinion of the Committee, the answers to the major questions posed by the sponsors of the survey.

Among the voluntary, non-profit, health insurance* plans on a national basis, the most widely accepted plan is the combination service-cash indemnity. Blue Shield in Michigan falls in that category. There is not known to be any great difference between the types of commercial insurance policies sold in Michigan and those generally sold throughout the country. In this state, there is but one Blue Shield plan administered by a single corporation—Michigan Medical Service.

This corporation is guided in its policy by the recognized policy-making body of the medical profession in this state. There are no Blue Shield plans offered in Michigan other than that by Michigan Medical Service. This contrasts with many other states which have one or more Blue Shield plans, with one or more corporations administering them.

Blue Shield in Michigan has a larger percentage of the total population of the state enrolled than does any other plan in any other state. A total percentage representing eight out of ten persons in Michigan (81 per cent) are covered by some form of health insurance. The responsibility and influence of Michigan Medical Service in the health insurance field in Michigan cannot be gainsaid when the fact is faced that six out of ten persons covered by health insurance (64.6 per cent) are protected by Blue Shield.

It is further significant that today, in contrast to yesteryear and in fantastic contrast to the situation in 1940, this state has reached a point of semi-saturation in the health insurance field. This has caused major competition for business between insuring agencies to be directed toward persons already insured, or becoming newly eligible. The remaining number of uninsured are, in their aggregate, relatively poor prospects.

Although often confused in terminology with

*The words "health insurance" or "insurance" used throughout these conclusions means some type of prepaid medical and/or surgical coverage.

the term Blue Cross, the existence of the Blue Shield plan is widely known and the terms Blue Cross or Blue Shield are rapidly becoming in the public mind generic,—meaning a non-profit voluntary health insurance plan. Those persons not covered by Blue Shield remain unprotected in the main, according to their replies, because they "can't afford it." No attempt was made to go behind this answer.

Coverage exists in all counties of the State with concentration paralleling density of population.

Blue Shield is popular in Michigan. Eighty-one per cent of the people who have it, like it. This is a higher percentage of favorable reaction than is held by the insured of any other company in which they are insured. A greater percentage of people have a favorable attitude toward Blue Shield than toward any other insurance plan offering medical-surgical coverage, and that percentage is a sizable majority of the total population of the state. Of interest is the fact that, on the whole, members of unions have a slightly more favorable opinion of Blue Shield than does the general populace, and an even greater percentage of favorable attitude when compared with non-members of unions. People in the most densely populated area of the state (Wayne County) expressed an unfavorable opinion more often than did the residents of other areas of the State. High rates was the reason most often given for an unfavorable attitude, when such was expressed. People like it, but some people don't like to pay for it.

The doctors like Blue Shield too, even though they feel that its service can and should be improved. They are more skeptical of the favorable attitude held by the people than the facts warrant.

The doctors have thousands of ideas for improving their corporation's service. They are not hesitant about expressing these ideas to their society or their corporation and seem perfectly willing to be identified with the thought they express, be it critical or complimentary. The doctors are not adverse in their attitude, generally, toward health insurance being sold by insurance companies. In fact, many, although a small minority of the total number, believe that the medical profession should "get out of the health insurance business altogether." They don't like plans which propose closed panel service at all.

The doctors' chief gripe at Blue Shield is "inequities" in the schedule of payments they receive for services. They say the fee schedule hasn't kept pace with the changing science of medicine, nor the rising cost of living. They think most of the people who have an unfavorable attitude toward Blue Shield have it because they don't understand what benefits they are entitled to and have an exaggerated concept of the amount of money they pay for protection. This judgment of the people's lack of knowledge and understanding is born out by the facts.

There is evidence of sufficient dissatisfactions

with various and sundry aspects of Blue Shield to warrant investigation of changes which might improve it, both from the standpoint of rates and benefits as well as from payments to doctors. This is not to say that, on the evidence, such a change should be drastic. The changes most often requested by respectable numbers of returns from doctors point to inequities which, although they may have existed before Blue Shield, are nonetheless accentuated, in the minds of the doctors, by Blue Shield. Specialties, hardly in existence when Blue Shield was born, now have standards and skills demanding consideration of increased payments on the basis of every criterion save tradition.

The public seems to understand and recognize the value of the more widely publicized medical-surgical procedures such as surgery and x-ray and want to be protected against their cost so they can have these services wherever and whenever needed. Illustration of this fact is the almost unanimous demand (96 per cent) for protection against surgical expense. Of the services not presently covered by Blue Shield, the highest number of people wanted x-ray in the doctor's office or the hospital out-patient department.

Great numbers of people are almost shockingly unfamiliar with the provisions of their Blue Shield contract or their insurance policy. Insofar as rates are concerned they almost always think they are paying more than they are. They think they are paying an average of 100 per cent more than they actually do! Reasons advanced for this common misconception is that the Blue Cross (Hospital) premium is often confused with the Blue Shield (Medical) premium since they are sold in the same package and only one total payment per month is made. Nonetheless, the wide divergence from reality of the cost or rates of Blue Shield is a fact and (see above) a major cause for unfavorable opinion. Since the overwhelming proportion of Blue Shield protection is purchased through the place of employment, it is quite possible that the subscriber merely accepts what is offered and doesn't find out what's in the policy. This may account for misconceptions about coverage which plague the doctors and makes them believe that the subscriber does not understand his contract. Almost 50 per cent of the doctors think that doctors, generally, don't understand the coverage offered, either.

Broadly speaking, the people want most of the benefits which they now have in the Blue Shield contract, but think they have more benefits in their contracts than are actually there. They want benefits they don't now have in about the same proportion and preferential sequence as the ones they mistakenly thought they had.

Most of the doctors believe that some benefits not presently included in the Blue Shield contract should be. Certain generalists and internists are in accord that some benefits which they would service should be included. Comparing the pay-

ments for their services now included in the contracts with those received by the surgeon and certain other specialties, they feel they are underpaid.

Most doctors agreed that if outpatient diagnostic benefits were to be added to the Blue Shield contract, such benefits should not be limited only to treatment in a hospital outpatient department, but should be qualified if the treatment were in the doctor's office or certified laboratories as well.

While doctors were almost equally divided on the question of what benefits should be added, they were in agreement that the medical service principle should not be limited to low-income groups. They also agreed that the service principle should apply to those subscribers in the \$7,500-and-below income bracket, providing the payment to doctors for services rendered to this group were increased.

The people are willing to pay more than they are now paying for prepaid medical care coverage. That statement is generally true but it is qualified with two provisions. The first qualification is that they will pay more than they are now paying if they get *all* the benefits they ask for, and it is quite obvious that they are willing to pay more than these services now would cost (at the prevailing \$5,000-income limit fee schedule). The other provision is that the income limit be raised to include a far larger majority of the people than is included under the \$5,000-income limit.

The evidence is that the people are willing to pay much more than they are now paying for the addition of relatively few and not too costly additional services. This may be an index of prosperity or it may be conditioned by the fact that they now think they are paying more than they actually are.

A deductible feature is popular with a large number of people—almost a majority when it is predicated upon a lowering of monthly premium costs. The survey also showed that twice as many people wanted major and minor costs covered as wanted major costs only. The value of this latter conclusion (taken from the Consumer Opinion Survey) in determining public opinion is dimmed by the demonstrated lack of unanimity on the meaning of the terms, as well as a lack of knowledge of the various benefits.

Findings of the Doctor Opinion Survey definitely give the conclusion that by far the majority of doctors in private practice want and need Blue Shield, believe in its policies, abide by its principles, and are satisfied with its administration. They would like to see as much of the control vested on the local level as can reasonably be done without sacrificing the present generally satisfactory performance of the corporation. Should additional control be placed on the local level, the doctors want the guiding hand to be the county medical society in every instance.

Widely agreed upon was the necessity of some supervision, more than is presently arranged, of the

utilization of Blue Shield. Even more definite was the opinion that greater supervision must be accorded utilization of Blue Cross. This necessity was sensed from the Consumer Opinion Survey, even though no question regarding utilization was asked (as it was not germane to the two basic aims of that survey). It seems fairly apparent that with the obvious advantages of a plan which has a service feature goes the responsibility of providing a maximum efficiency and a minimum of needless waste.

Throughout the Doctor Opinion Survey, the results showed the doctors generally agreed on basic principles and basic philosophies and supported present policies, no matter when and with which questions they were tested. Areas of lack of agreement were recognizable only on questions when matters of methods or fees were at stake.

And in instances which involved the need for knowledge of the more difficult and unfamiliar aspects of insurance or business practice marked agreement was usually not apparent. It was noted

that upon questions which involved intimate relationships with agencies, the doctors uniformly tended to prefer to "stay away" from contact with these agencies as a means of avoiding difficulty or external controls, which they obviously abhor. However, the doctors are willing to subject themselves to disciplining from their own profession as a practical necessity, even though it means some loss of independence in their practice. These findings are consistent with the profession's opinion that policy matters in respect to administration of Blue Shield should remain, in general, the prerogative of the doctor but that lay experts were needed to solve administrative problems with the help of advisors from the profession.

These are a few of our conclusions. You are welcome to draw additional conclusions from the tables published in this study.

* * *

The preceding Conclusion Section was prepared especially for the September 23-24, 1957, meeting of the Michigan State Medical Society House of Delegates. In subsequent publications of this study, this section may be augmented.

Highlights

PUBLIC OPINION SURVEY OF PREPAID COVERAGE AND RELATED COSTS

1. An overwhelming majority (81 per cent) of people in Michigan have some type of health insurance to protect themselves against unpredictable medical expenses.

2. Just over a third of the relatively small number of those who did not have health insurance claimed they hadn't bought it because it was too expensive for them. The rest gave varying reasons and included the persons who said they never got around to taking out a policy, as well as the rugged individuals who didn't feel they needed insurance because they could take care of themselves.

3. More than twice as many insured* people (64.6 per cent) are covered by Blue Shield in Michigan than by all other health insurance plans and policies combined.

4. All or part of medical insurance premiums are paid by employers for half of the Michigan policy-holders, and employers pay the entire premium for about one-third of this group. Two-thirds of these people said they would be willing to pay an additional premium themselves to get any add-

ed benefits they would like in their group contract. One-third were not willing to pay an added premium to get added benefits over and above that paid by their employer.

5. The ratio of the insured in the surveys generally agreed with the number of family groups, homes with only a husband and wife, and single people in the state. The ratio is approximately 5-3-2—five for family, three for husband and wife, and two for single.

6. Nearly three out of four people have called upon their insurance company for policy benefits.

7. Of those using their insurance, 61 per cent had to pay an additional amount over and above that paid for them by the insurance company. Slightly more than half of the extra charges were from doctors' fees, and less than half were for services not covered in their policy.

8. X-ray was the major service, other than doctor fees, causing the extra charge 17-19 per cent of the time.

9. Twenty-two per cent of the people said they paid less than \$50 for medical expense over and above that amount paid by the insurance company the last time they used their policy.

10. People want x-ray services, either in the doctors' offices or out-patient departments of hospitals, covered in their policies. Farm, labor, and business and professional groups had four benefits they were most interested in—emergency house calls, diagnostic services in doctors' offices, x-ray in hospital out-patient department, and diagnostic x-ray in doctors' offices. Farmers were least inter-

*The word "insured" used throughout these Highlights means a person who is protected by some type of prepaid medical and/or surgical coverage.

NOTE: People who were interviewed were allowed to make up a hypothetical policy for themselves by selecting benefits from a complete list of possible services in hospitals, doctors' offices and the patient's home. The list included everything that people might possibly want in a policy. Numbers 11 to 18 tell what they wanted in medical insurance protection, according to the three types of plans offered—family plan, self and spouse or single persons.)

ested in the adding of any of those benefits.

11. Everybody in all three plans wanted three in-hospital benefits in particular. Surgical led the list, diagnostic x-rays were second, and medical in-hospital visits were third.

12. When they were asked to choose what services members of all three plans wanted in a doctor's office, again they were unanimous in the leading choice—each desired emergency first aid. The second selection was minor surgical treatment.

13. Relatively fewer people were interested in having medical services in their homes. Less than half of them wanted home calls covered. About the same number wanted ambulance service, too.

14. The benefits selected by those interested in a hypothetical "family" plan would cost \$11.24 a month. The price for the "self and spouse" plan after selections were made was \$8.75, and the cost of the "single" plan was \$3.26. Remember, these price tags on each plan differ because, naturally, they vary in proportion to the number of people covered in each of their respective and individual contracts.

15. Union members developed hypothetical policies which cost slightly more than nonunion members. Union members in the "family" plan chose one which would cost 62 cents more. Those on the "self and spouse" plan selected one costing 75 cents more. However, union members in the "single" plan, chose a policy costing exactly the same as nonunion members. So the maximum variation in the price of a policy selected by union and non-union members was only 75 cents.

16. In a comparison between income groups, those making over \$5,000 a year wanted a "family" policy that cost only 60 cents more than the one selected by the people making less than \$5,000 a year. Those in the "self and spouse" plan making more than \$5,000 a year picked a plan that costs 23 cents more than the people who were earning less than \$5,000 a year. And those in the "single" plan making over \$5,000 a year chose a policy that costs 3 cents less than the one desired by the people who earned less than \$5,000 annually, so the greatest spread in this case was only 60 cents.

17. Rather than eliminate services in the policy they had selected to reduce the monthly premium, three-fourths of the people preferred to pay for the benefits in their original selection, rather than eliminating any item of service. The percentage of the vote on the items they would eliminate was very small. In fact, the highest percentage was only 11 per cent, and this was voted by those in the "self and spouse" plan who chose diagnostic x-rays in the out-patient departments of hospitals as the thing they would eliminate. Those in the "family" plan also chose this service, but only 9 per cent were in favor of eliminating it.

18. After eliminating certain coverages to bring the costs down, the prices of the three hypothetical plans stacked up like this. The "family" plan

was reduced from \$11.24 to \$10.09, or a reduction of 95 cents. The "self and spouse" plan originally selected would cost \$8.75 a month. This was reduced by \$1.10 to \$7.65 a month. The final price desired in the "single" plan was only 14 cents cheaper. Originally the "single" plan people had selected a policy worth \$3.26 a month, and in their final selection it was \$3.12 a month. In every case, union members were willing to pay an average of 33 cents more than nonunion members for the services they wanted.

19. Forty-seven per cent of the people were in favor of the idea of a deductible type of medical-surgical insurance plan; 53 per cent were not in favor of it.

20. A little less than half of the people who favored a deductible plan were willing to pay the first \$25 of medical expense. About a third of those who favored it, were willing to pay up to \$50, and slightly more than 10 per cent were willing to pay the first \$100 of medical expense.

21. A two-thirds majority of both farm and labor organization members wanted a \$25 plan. The same percentage of people making less than \$5,000 a year wanted the \$25 deductible.

22. Two-thirds of the people wanted their prepaid medical plan to cover both major and minor items of expense.

23. A majority of the people (78 per cent) would rather have the insurance company pay the doctor directly.

24. When people were asked what they thought their insurance contracts covered, 95.8 per cent knew they had surgical benefits, 93.9 per cent knew they were covered for obstetrics, 83.6 per cent correctly figured they had diagnostic X-ray, 65 per cent thought medical visits in the hospital were included, but only 44.4 per cent—less than half—knew for sure that they had the benefit of emergency first aid in the doctor's office. And more seriously, only 27.8 per cent knew that nineteen surgical procedures, which could be done in the doctor's office, were covered. Yet the maximum contract covered all these things.

25. Then they were asked what they thought they had, and here's how they answered. Nearly half—45 per cent—assumed they had diagnostic benefits other than x-ray, 42 per cent assumed the surgical assistant was paid by the insurance company, 36 per cent figured they were covered when their doctor had a medical consultation with another doctor about their case, 34 per cent banked on the insurance to cover pre- and post-natal care in the doctor's office, and finally, 32 per cent figured that out-patient diagnostic x-rays were covered. But none of these benefits are covered by existing Blue Shield contracts.

26. A majority of the public (64 per cent) has a favorable opinion of Blue Shield. Only 10 per cent of the people felt unfavorable toward the plan, while one-fourth of the people interviewed had no opinion, one way or the other. The ma-

majority of union members felt favorably towards Blue Shield. In fact, union members felt more favorably toward Blue Shield than the general public, by 2 per cent.

27. Of the small percentage of people who felt unfavorably toward Blue Shield, two-thirds felt the rates were too high, and only one-third complained about the coverage.

28. The policy holders of Company A were asked to express the opinion they had about their company. More than three-fourths of them looked upon the company favorably. When policy holders in Company A and nonpolicy holders in Company A were asked what they thought of the firm, one-fourth of all the people interviewed had a favorable opinion of the company, but two-thirds expressed no opinion. Of the 12 per cent who had an unfavorable attitude toward Company A, half

of them felt the company misrepresented the policy and had a poor claim-paying record. Less than 10 per cent complained about poor coverage and high rates.

29. One-half of the policy holders in Company B had a favorable opinion of the organization, but slightly more than 40 per cent had no opinion about the company. All of the persons interviewed, whether they were policy holders or not in Company B, were asked how they felt about the company. Three-fourths of the people had no opinion, 14 per cent had a favorable opinion, and 10 per cent had an unfavorable opinion. Half of the people who had an unfavorable attitude toward the company thought they had a poor claim-paying record, about one-third felt the policy was misrepresented and gave poor coverage; while 14 per cent complained about the rates.

THE DOCTOR OPINION SURVEY ON PREPAID MEDICAL CARE PLANS

1. Of Michigan's M.D.s, 28 per cent believe that administration of the major medical and surgical prepayment plans in Michigan should remain in the hands of the medical profession and the commercial insurance companies on a competitive basis, as it exists today. One-third felt that the plan should be administered by qualified laymen retained by the medical profession. Another third felt that the medical profession itself should administer the programs.

2. Nearly two-thirds of the doctors believe that their profession is not given sufficient voice at the local level in determining Blue Shield policies. Half of them don't think they have enough to say about Blue Shield policies on the state level. They feel that county medical societies and specialty groups should have more to say about policy matters.

3. Almost three-quarters of the doctors agreed that the House of Delegates should elect the Blue Shield Board of Directors.

4. The majority (60 per cent) thought that the Board of Directors at Blue Shield should include representation from groups other than the medical profession. Slightly more than three-fourths of them felt that management should be represented on the Board, and just under three-fourths thought that labor should be represented.

5. Doctors feel that some supervisory control should be placed over the medical care provided

under medical insurance plans. More than half of them said that the medical profession should exercise these controls. Forty-five per cent said that a combined board of doctors and lay persons should handle these controls.

6. Committees to oversee the utilization of Blue Shield are favored by 75 per cent. There is little difference of opinion among those who favored utilization committees when answers from doctors were compared by the size of the communities in which they lived. In addition, the doctors felt that a utilization committee should be a standing function of county medical societies, and a little over one-third thought that hospital staffs should have that responsibility.

7. The majority of the doctors (83 per cent) did not believe that Blue Shield's medical service principal should be available only to people with incomes under \$5,000.

8. More than half of both the generalists and specialists agreed that Blue Shield should not offer a contract which would include all professional services.

9. If out-patient diagnostic benefits were added to Blue Shield contracts, almost half of the doctors felt that this benefit should be paid when treatment was given in a doctor's office. About 10 per cent fewer doctors felt that payment should be made only when the service was provided in hospital out-patient departments and certified laboratories.

10. Just about three-fourths of the doctors believe that insurance benefits should provide for consultation. Ten per cent more specialists believed this than did general practitioners.

11. Doctors were divided about half and half on whether the present 24-hour limitation on first aid treatment should be increased. Two-thirds of those who favored it thought it should be increased to 48 hours.

NOTE: These are the opinions of the members of the Michigan State Medical Society on prepaid medical care plans. One-third of those answering the questionnaire were general practitioners, 13 per cent were internists, and 12 per cent, surgeons. The remaining doctors who answered the questionnaire were identified with seventeen other specialties. One-third of the doctors lived in cities with a population of more than half a million. Six per cent lived in cities of less than 2,500 people. Eighty per cent of the doctors who returned the questionnaires participate in at least one of the two Blue Shield contracts, and 68 per cent participate in both Blue Shield income-limit contracts.

12. A majority of the doctors do not believe that Blue Shield should offer hospital coverage on an indemnity basis, nor do they believe that Blue Shield should offer such things as life insurance, disability protection, etc., as well as medical service coverage in the policies.

13. Because of present economic conditions, 60 per cent of the doctors recommended that the present \$5,000 income limit be raised along with a higher-fee schedule for the contract.

14. One-third of the doctors recommended that a \$7,500 income-limit contract be added to the \$5,000 and \$2,500 contracts which are already offered.

15. Sixty-eight per cent favored a new \$7,500 income limit contract providing the present \$5,000 fee schedule was raised by 32 per cent and then used as the \$7,500 fee schedule.

16. A majority (70 per cent) feel that the present \$2,500 contract should not be eliminated, nor do they believe that the \$2,500 contract should be continued as an indemnity to serve as basic coverage for larger income groups.

17. A resounding majority (83 per cent) said they did not object to reporting their total charges for each case on the service report form submitted to Blue Shield.

18. Sixty-three per cent feel that the most important factor in determining their fees is to follow the "usual" fee in the community as representing the value of the services rendered, whether it is a non-insured patient or one who has Blue Shield but has an income greater than the income limits of his contract.

19. A majority of the doctors (65 per cent) feel that the Blue Shield should be raised on a selective basis, and 69 per cent feel that Blue Shield should adjust its premiums and fee schedules as living costs vary.

20. Of the general practitioners, 90 per cent do not advocate a difference in the fees paid by Blue Shield to generalists and specialists for the same category of treatment. Sixty per cent of the specialists feel there should be a difference in fees.

21. If the patient knows of the payment, 82 per cent of the doctors believe that assisting surgeons should be paid by Blue Shield. Ninety-two per cent of the generalists and 75 per cent of the specialists agreed to this. Of those agreeing, 47 per cent thought it should be paid in all hospitals, 42 per cent favored separate allowances for the assisting surgeon based on a percentage of the surgical fee paid to the surgeon in charge, 37 per cent favored separate allowances for the assisting surgeon on a flat rate based on major and minor surgery, and 35 per cent thought it should be paid only in hospitals without interns and residents.

22. More than half of the doctors said that their income has been increased by Blue Shield because of better collections.

23. Eighty-one per cent believe that their colleagues are dissatisfied with Blue Shield fees. More doctors in cities of 100,000-500,000 felt this way.

24. Slightly over half of the doctors felt that Blue Shield subscribers should receive a roster of participating doctors providing it can be done ethically.

25. Eighty-two per cent of the doctors stated that separate contracts should be offered by Blue Shield in addition to full pay policies, to permit the subscriber to buy a deductible or coinsurance policy.

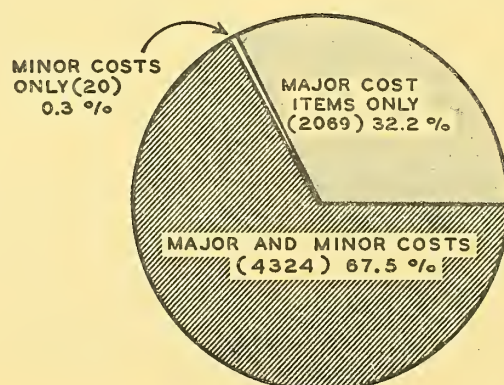
26. Eighty-one per cent personally believe that Michigan Medical Service is providing a satisfactory service to the public at present, but a majority of these think its service can be improved. However, 57 per cent believe that the public is not entirely satisfied with Blue Shield. Yet, on the other hand, the doctors believe that the subscribers are satisfied.

27. Eighty-eight per cent of the doctors believe that Blue Shield subscribers do not sufficiently understand their contract.

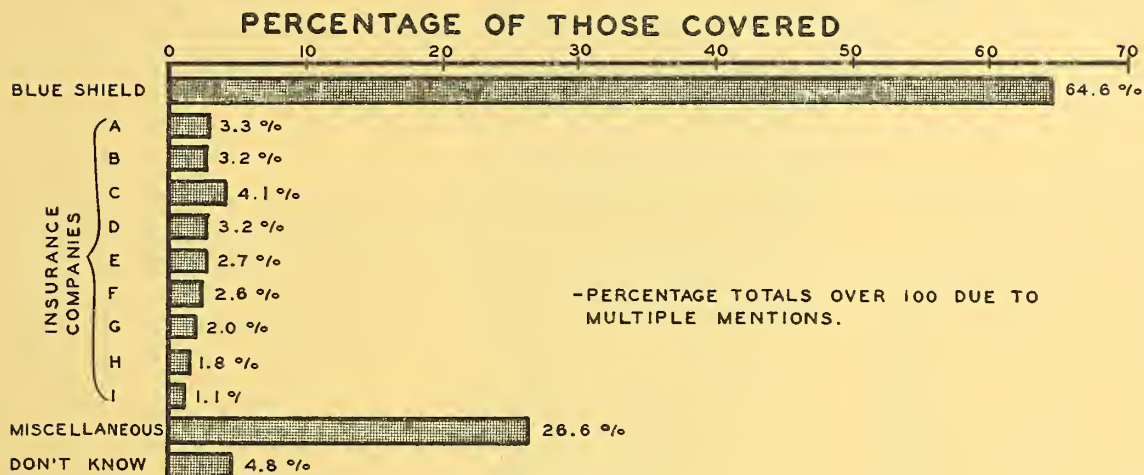
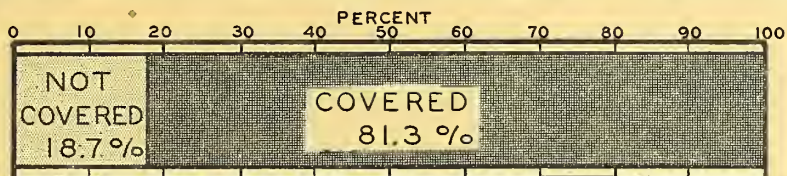
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The preceding Highlights Section was prepared especially for the September 23-24, 1957 meeting of the Michigan State Medical Society House of Delegates. In subsequent publications of the Study this section may be augmented.

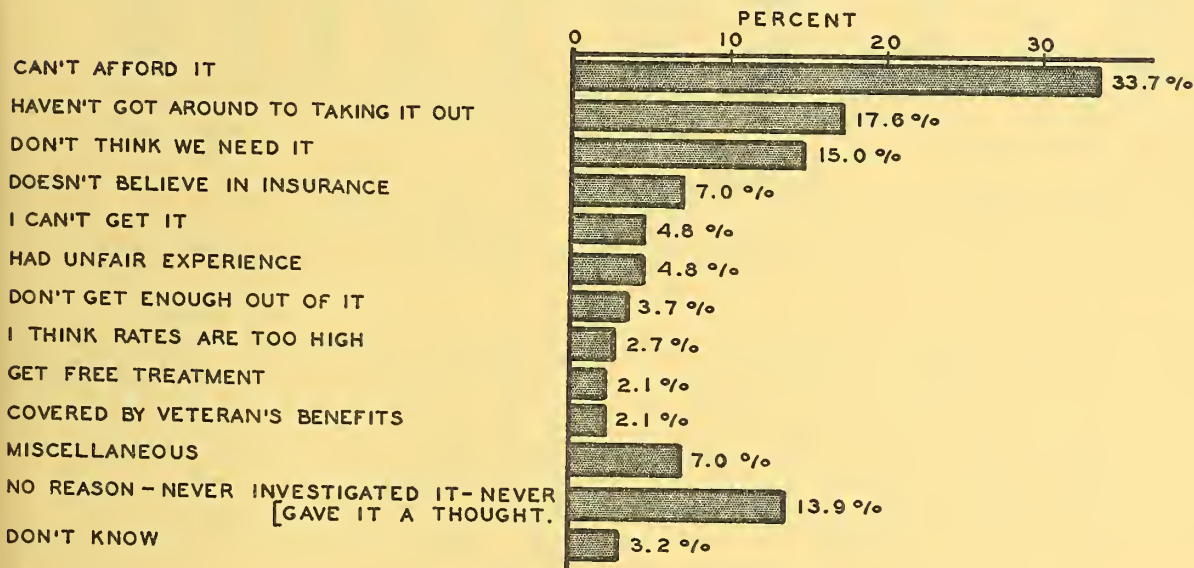
TYPE OF COVERAGE DESIRED



PERCENTAGE OF PERSONS IN MICHIGAN COVERED BY A PREPAYMENT DEVICE



NO COVERAGE BECAUSE:



OPINION STUDY OF PREPAID MEDICAL CARE COVERAGE IN MICHIGAN

COST FACTOR VS. WILLINGNESS TO PAY

(MONTHLY)

BLUE SHIELD SUBSCRIBERS BELIEVE THEY PAY \$5.98
 BLUE SHIELD SUBSCRIBERS ARE PAYING \$2.83
 ALL PERSONS INTERVIEWED ARE WILLING TO PAY \$6.95

(ALL FIGURES AVERAGE FOR SINGLE, SELF AND SPOUSE, AND FAMILY PLANS)

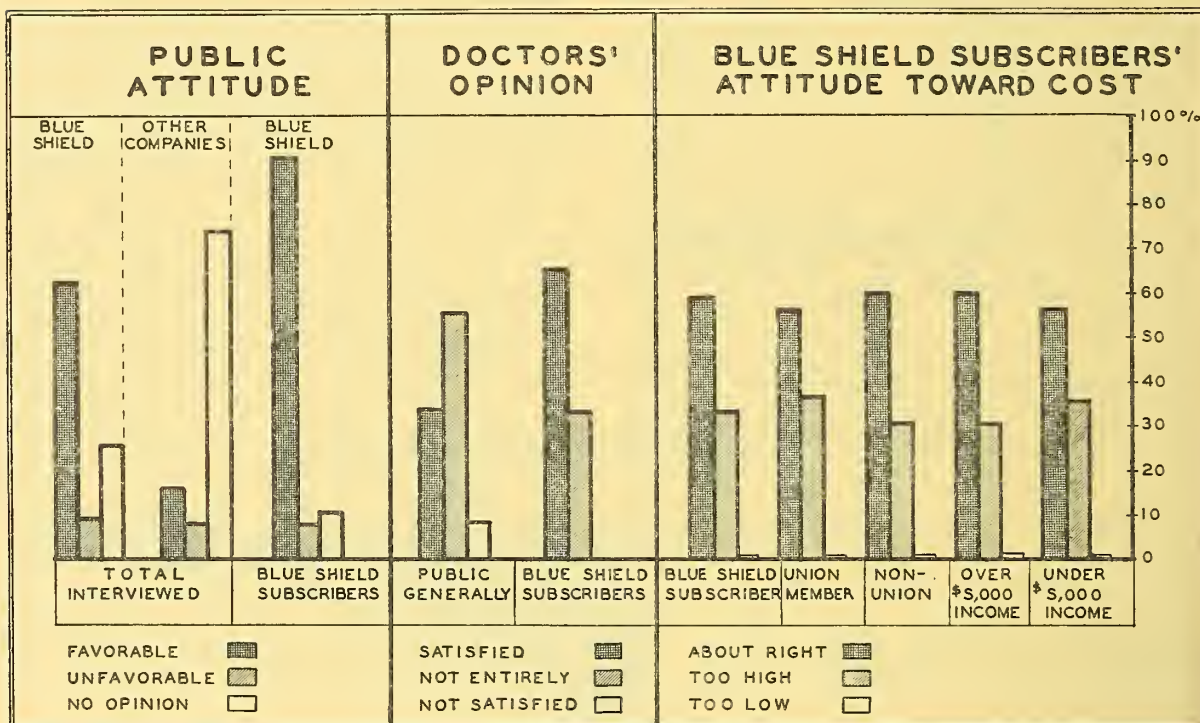
IS A DEDUCTIBLE PLAN FAVORED?

	YES	NO
TOTAL RESPONSES	47.0%	53.0%
UNION MEMBERS	43.6%	56.4%
NON-MEMBERS	43.6%	51.2%
OVER \$5000 INCOME GROUP	51.4%	48.6%
UNDER \$5000 INCOME GROUP	41.9%	58.1%
DOCTORS	62.2%	17.8%

HOW MUCH SHOULD BE DEDUCTIBLE?

FIRST \$25.00	47.7% OF RESPONSES
FIRST \$50.00	33.0% OF RESPONSES
FIRST \$100.00	11.5% OF RESPONSES

ATTITUDE



DOCTORS ATTITUDE

BLUE SHIELD IS PROVIDING A SATISFACTORY SERVICE

YES 30.1%
 YES BUT COULD BE IMPROVED 50.7%
 NO 5.1%
 NO UNLESS GREATLY IMPROVED 14.1%

SUPERVISORY CONTROLS ARE NECESSARY *

FOR BLUE SHIELD YES 78.8%
 NO 21.2%
 FOR BLUE CROSS YES 85.4%
 NO 14.6%

* (ESTABLISH POLICING COMMITTEES ON COMMUNITY LEVEL UNDER COUNTY MEDICAL SOCIETIES)

SUBSCRIBER AWARENESS OF CONTRACT BENEFITS

BENEFITS INCLUDED

SUBSCRIBERS BELIEVING BENEFITS INCLUDE

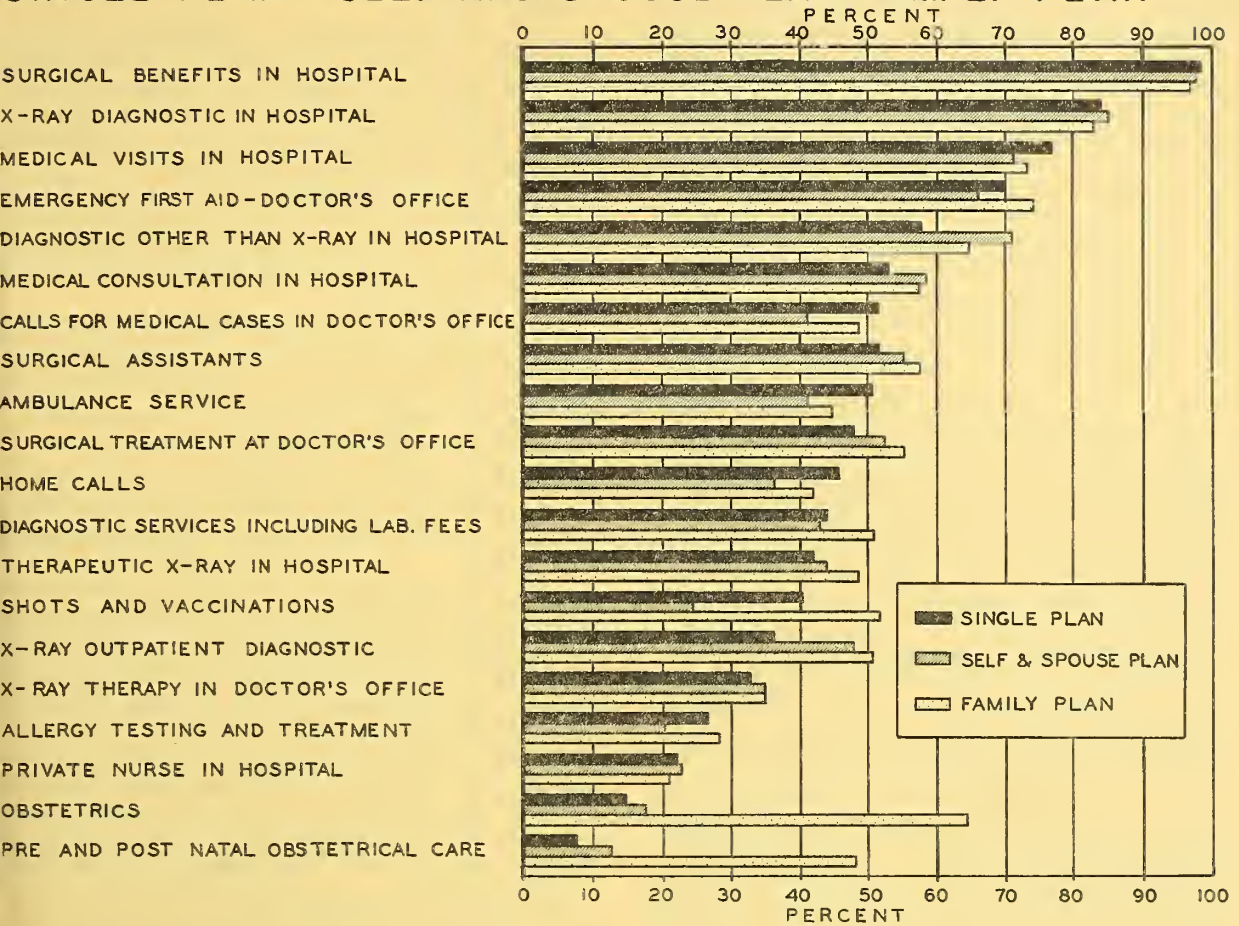
SURGICAL BENEFITS - - - - - 95.8%
 OBSTETRICS - - - - - 93.9%
 X-RAY DIAGNOSTIC - - - - - 83.6%
 MEDICAL VISITS IN HOSPITAL - - - - - 65.0%
 SURGICAL TREATMENTS IN DOCTOR'S OFFICE 19 (PROCEDURES) - - - - - 27.8%
 EMERGENCY FIRST AID IN DOCTOR'S OFFICE - - - - - 44.4%

BENEFITS NOT INCLUDED

DIAGNOSTIC OTHER THAN X-RAY - - - - - 45.1%
 SURGICAL ASSISTANTS - - - - - 41.7%
 MEDICAL CONSULTATION - - - - - 35.6%
 PRE AND POST NATAL OBSTETRICAL CARE IN DOCTOR'S OFFICE - - - - - 34.3%
 X-RAY OUTPATIENT DIAGNOSTIC - - - - - 31.8%

DESIRED BENEFITS

SINGLE PLAN - SELF AND SPOUSE PLAN - FAMILY PLAN



Summary

Summary of Opinion Survey of Prepaid Medical Care Coverage and Related Costs

Who has medical-surgical protection?

1. Eight out of ten persons (81 per cent) in Michigan have some kind of prepayment device protecting them against medical-surgical expense.

(a) Of the occupational groups, skilled tradesworkers have the highest coverage—nine out of ten (91 per cent). Next highest are clerical and salespeople, eight out of ten (85 per cent), unskilled laborers eight out of ten (83 per cent) and professional and semiprofessional eight out of ten (83 per cent). Lowest coverage is found among retired, widows and unemployed with five out of ten (49 per cent).

(b) Coverage in rural and urban areas is nearly equal (urban 81 per cent, rural 80 per cent).

(c) Union members have higher coverage than nonmembers of unions, the former having nine out of ten (96 per cent), the latter seven out of ten (76 per cent).

(d) In the "over-\$5,000" family income group eight out of ten are covered (86 per cent) compared to seven out of ten (75 per cent) for the "under-\$5,000" family income group.

What company or plan provides the coverage?

1. Six out of ten persons (64 per cent) having medical coverage were subscribers to Blue Shield.

2. About two out of ten (18 per cent) of those covered by any plan were protected by more than one policy or contract.

Extent of awareness of benefits in contracts

1. Blue Shield subscribers were asked their opinion on what benefits they thought were provided in their contracts. They were given a prepared list of benefits some of which were offered by Blue Shield and some of which were not. They were asked to select from this list the benefits they thought were included in the maximum Blue Shield contract. Following is the percentage of inclusions given for each benefit which is actually covered by the maximum Blue Shield contract:

Surgical benefits	95%
Obstetrics	93%
X-ray diagnostic	83%
Medical visits in hospital	65%
Surgical treatments in doctor's office (19 procedure)	27%
Emergency first aid in doctor's office	44%

Note: Anesthesia was included as part of the surgical benefit.

2. From the total listed benefits to be selected from, those which are not covered by present Blue Shield contracts, but which were mistakenly believed to be covered are as follows: (Only those benefits receiving more than a 30 per cent mention are listed.)

Diagnostic other than X-ray	45%
Surgical assistants	41%
Medical consultation	35%
Prenatal and postnatal obstetrical care in doctor's office	34%
X-ray out-patient diagnostic	31%

Opinions regarding monthly premiums for medical coverage

1. The average cost for all monthly premiums for medical-surgical coverage was thought by the respondents to be \$6.25.

2. Nearly four out of ten persons (37 per cent) did not know how much their monthly or annual premiums amounted to.

3. Of the Blue Shield subscribers nearly three out of ten persons (27 per cent) did not know their monthly or quarterly premium cost. Of those who did answer, their average estimate was \$5.96 per month (all plans, single, couple and family, were included).

Estimates of amount of cost paid by employer

1. Five out of ten persons (54 per cent) said they paid the entire cost of the medical-surgical coverage premiums. The employer was thought to have paid all the premium by two out of ten persons (16 per cent) and part of the cost of premium by three out of ten persons (30 per cent).

2. About 80 per cent of the employers paying part of the premiums paid half the cost with the employee paying the other half.

Are the cost of plans believed to be "about right," "too high," or "too low," considering the benefits provided?

1. Of the single and widowed persons seven out of ten thought the cost of Blue Shield protection was "about right." Slightly fewer married persons, six out of ten (57 per cent) thought that the

costs were "about right." Three out of ten persons (28 per cent) in the divorced category thought that the cost of Blue Shield premiums were "about right."

2. Six out of ten union members (56 per cent) thought that Blue Shield premium costs were "about right." A slightly higher percentage of non-members of unions were satisfied with the costs, six out of ten (60 per cent) indicating they thought the costs were "about right."

3. Of the "over-\$5,000" income group, six out of ten persons (60 per cent) thought costs of Blue Shield premiums were "about right" and 57 per cent in the "under-\$5,000" income group held the same opinion.

4. Reactions of a small sample to the rates charged by various insurance companies vary between 55 per cent and 93 per cent thinking the costs were "about right."

Persons claiming benefits under medical-surgical coverage plans

1. Seven out of ten persons (69 per cent) have called upon their prepayment device for benefit payments.

2. Just over eight out of ten (83 per cent) carrying the family contract have used their benefits. Seven out of ten (66 per cent) with the self and spouse contract have claimed benefits, and four out of ten persons (38 per cent) with the single contract have claimed benefits.

3. Five out of ten (48 per cent) of the persons under age 30 have claimed benefits. Eight out of ten persons (81 per cent) between the ages of 30 and 40 have claimed benefits and between six and eight out of ten (60 per cent to 75 per cent) of the older-age groups have called for benefits under their policies or contracts.

4. Thirteen per cent more union members have claimed benefits than nonmembers of unions.

The illnesses or injuries which resulted in benefit claims

1. Of the persons claiming benefits (52 per cent of the total coverage) nearly two out of ten (18 per cent) did so for an illness or injury classified, by the respondent, as an emergency.

2. The next most frequently-mentioned reason for benefit claims was obstetrics (16 per cent) followed by observation (12 per cent). With the exception of tumor removal and broken bones, no other single illness category accounted for more than 5 per cent of the mentions.

Amount of medical-surgical expense covered by benefits

1. Four out of ten persons (44 per cent) had had their entire medical-surgical expense covered during their latest compensable illness.

2. Nearly six out of ten persons (59 per cent) who made claims for compensable illness, had part of the medical-surgical expense paid by the Blue Shield or insurance company. Three per cent received no benefits and 3 per cent "didn't know."

3. Blue Shield paid all expenses 38 per cent of the time, part of the cost in 58 per cent of the cases and none of the cost in 1 per cent of the reported instances.

Amount of the cost of medical-surgical care paid by individual

1. Of the persons whose medical coverage plan paid "part," "none" and "don't know" (37 per cent of the total number having compensable illnesses), the following amounts were paid by these individuals over and above the amounts paid for them by the insuring plan:

\$1.00—\$50.00	142
\$50.00—\$100.00	44
\$100.00—\$200.00	25
\$200.00—\$1,000.00	8

2. One out of ten of the respondents (12 per cent) to the question "How much of the cost of the medical-surgical expense did you pay?" did not know how much they had paid and one out of ten had one or more additional policies which covered remaining cost or more.

Medical-surgical items not covered by plan or insurance

1. Although four out of ten persons (40 per cent) could not recall the medical-surgical items for which they had paid in excess of benefits received, three out of ten (31 per cent) had to pay for X-ray, 14 per cent for medication, 7 per cent for pre- and post-natal care, 6 per cent for anesthetic, and 6 per cent for laboratory fees. The remaining items had fewer than 4 per cent of the total mention.

Reasons for extra expense, above that paid by plan or insurance

1. Three out of ten (34 per cent) paid the costs in addition to the amount paid by the plan or insurance, because the services were not covered in the policy or contract.

2. Four out of ten (44 per cent) paid the additional costs because the doctor's fee was more than the amount provided. Two out of ten (16 per cent) said that both noncoverage and higher doctor's fees was the cause, and one out of ten (12 per cent) didn't know.

Payment to doctor directly, or to patient

1. In three out of four instances (76 per cent), the plan or insurance paid the doctor directly. One out of four (25 per cent), paid the doctor and was then reimbursed by the plan or insurance.

Extent of coverage in the past for medical-surgical care of those who are not now covered

1. Of the persons not now covered, five out of ten (50 per cent) had been covered at one time and the same number believed they had never been protected.

Reasons for not now being covered

1. "Can't afford it" headed the list of reasons

for not now being covered, with three out of ten (34 per cent) of the total mentions. One out of five (20 per cent) in the "over-\$5,000" income group cited this reason, and two out of five (42 per cent) in the "under-\$5,000" income group mentioned it.

2. "Haven't gotten around to taking it out" was cited by two out of ten (17 per cent).

3. "Don't think we need it" was mentioned by one out of ten (15 per cent).

Benefits desired by "family plan" respondents

1. Of the benefits desired in the "Medical-Surgical Services in Hospital" category those cited most often were: surgical benefits 96 per cent, x-ray diagnostic 83 per cent, and medical visits in hospital 74 per cent. Of the remaining benefits listed each received less than 66 per cent mention.

2. Of the benefits desired in the "services in the doctor's office" category, that cited most often was "emergency and first aid," 75 per cent. Of the remaining benefits listed each received less than 57 per cent mention.

3. Forty-five per cent wished to have ambulance service added to the list of benefits and 42 per cent wanted home calls.

4. When the benefits desired were separated on the basis of whether the respondent's employer presently pays "all," "part," or "none" of the premium, relatively minor percentage differences were indicated for inclusion of selected benefits.

Monthly costs of premiums for benefits selected under full family coverage contracts or plans

1. The average monthly premium cost for the benefits selected by those respondents wishing coverage for themselves and family was \$11.24. This figure varied by no more than \$1.00 per month, regardless of whether the average was taken from the replies of union members or nonunion members, the over- or under-\$5,000 income groups, or whether the employer of the respondent presently paid "all," "part," or "none" of the premium.

2. When asked to eliminate benefits that were least important in order to reduce the total monthly premium cost, eight out of ten persons (78 per cent) were willing to pay the costs for the benefits rather than to eliminate items.

3. The benefit receiving the highest percentage of mention for elimination was X-ray out-patient diagnostic. This was cited by one out of ten persons (8 per cent) of the total number of persons choosing the family plan. Five per cent would eliminate private nurse ten-day limit, with other benefits receiving even smaller percentage.

4. Monthly premium cost of the final selected plan (after eliminating certain coverages to bring the cost down) was an average of \$10.09 per month. Variations of this cost between union members and non-members, and between the "over-\$5,000" and "under-\$5,000" income groups was less than \$1.00 per month. A definite varia-

tion occurred with the "sixty-years-and-over" age group where the average was \$5.94.

Benefits desired by "self and spouse" respondents

1. Of the benefits desired in the "Medical-Surgical Services in Hospital" category those cited most often were: surgical benefits 97 per cent, x-ray diagnostic 85 per cent, medical visits in the hospital 71 per cent, and diagnostic other than x-ray 71 per cent. Of the remaining benefits listed each received less than 60 per cent mention.

2. Of the benefits desired in the "Services in the Doctor's Office" category those cited most often were: "Emergency and first aid" 66 per cent, and surgical treatments 53 per cent. Of the remaining benefits listed, each received less than 45 per cent mention.

3. Forty-one per cent wished to have ambulance service added to the list of benefits and 36 per cent wanted home calls.

4. When the benefits desired were separated on the basis of whether the respondent's employer presently pays "all," "part," or "none" of the premium, relatively minor percentage differences were indicated for inclusion of selected benefits.

Monthly costs of premiums for benefits selected under self and spouse coverage contracts or plans

1. The average monthly premium cost for the benefits selected by those respondents wishing coverage for themselves and spouse, was \$8.75. This figure varied by no more than \$1.00 per month regardless of whether the average was taken from the replies of union members or nonunion members, the over-or under-\$5,000 income groups, or whether the employer of the respondent presently paid "all," "part," or "none" of the premium.

2. When asked to eliminate benefits that were least important in order to reduce the total monthly premium cost, eight out of ten persons (77 per cent) were willing to pay the costs of the benefits selected rather than to eliminate items.

3. The benefit receiving the highest percentage of mention for elimination was x-ray out-patient diagnostic. This was cited by one out of ten persons (10 per cent) of the total number of persons choosing the self and spouse plan. Eight per cent would eliminate calls for medical cases in the doctor's office. Other benefits received even smaller percentages.

4. Monthly premium cost of the final selected plan (after eliminating certain coverages to bring the cost down) was an average of \$7.65 per month. Variations of this cost between union members and nonmembers, between the "over-\$5,000" and "under-\$5,000" income groups, and between the various age groups was less than \$1.00 per month.

Benefits desired by "single" plan respondents

1. Of the benefits desired in the "Medical-Surgical Services in Hospital" category those

cited most often were: surgical benefits 98 per cent, x-ray diagnostic 84 per cent, and medical visits in hospital 77 per cent. Of the remaining benefits listed each received less than 66 per cent mention.

2. Of the benefits desired in the "Services in the Doctor's Office" category that cited most often was: "emergency and first aid," 70 per cent. Of the remaining benefits listed each received less than 52 per cent mention.

3. Fifty-two per cent wished to have ambulance service added to the list of benefits and 48 per cent wanted home calls.

4. When the benefits desired were separated on the basis of whether the respondent's employer presently pays "all," "part," or "none" of the premium, relatively minor percentage differences were indicated for inclusion of selected benefits.

Monthly costs of premiums for benefits selected under "single" coverage contracts or plans

1. The average monthly premium cost for the benefits selected by those respondents wishing coverage for self only, was \$3.26. This figure varied by no more than 50 cents per month regardless of whether the average was taken from the replies of union members or nonunion members, the over- or under-\$5,000 income groups, or whether the employer of the respondent presently paid "all," "part," or "none" of the premium.

2. When asked to eliminate benefits that were least important in order to reduce the total monthly premium cost, nine out of ten persons (91 per cent) were willing to pay the costs of the benefits selected rather than to eliminate items.

3. The benefit receiving the highest percentage of mention for elimination was calls for medical cases at the doctor's office. This was cited by 3 per cent of the total number of persons choosing the "single" plan. Two and seven tenths per cent would eliminate x-ray outpatient diagnostic, 2.3 per cent would eliminate home calls.

4. Monthly premium cost of the final selected plan (after eliminating certain coverages to bring the cost down) was an average of \$3.12 per month. Variations of this cost between union members and nonmembers, between the "over-\$5,000" and "under-\$5,000" income groups, and between the various age groups was less than 50 cents per month.

Should plans or insurance cover major costs of illness, or minor expenses, too?

1. Six out of ten persons (63 per cent) felt that both major and minor costs should be covered by medical care coverage.

2. Nearly seven out of ten union members (68 per cent) favored coverage for both major and minor costs exceeding nonmembers in this respect by 7 per cent.

3. The "under-\$5,000" income group favored this coverage by 67 per cent, a margin of 6 per cent over the income group which earned in excess of \$5,000.

Attitude toward paying a deductible amount of the expense of each illness or disability, in order to reduce the monthly cost of coverage

1. Five out of ten persons (47 per cent) favored paying a deductible amount in order to reduce coverage rates.

2. Four out of ten union members (44 per cent) in the "over-\$5,000" group favored this plan compared to five out of ten nonunion members (54 per cent) in the same income group.

3. A comparison of those in the "under-\$5,000" income group, indicated four out of ten union members (42 per cent) were in favor of deductible with the same number of nonmembers (41 per cent) favoring.

4. When the employer presently paid all of the monthly premium for respondents, nearly five out of ten persons (46 per cent) favored a deductible plan. When the employer presently paid part of the monthly premium, the five out of ten persons (49 per cent) favored the deductible feature. In cases where all the premium costs were borne by the respondent, five out of ten persons (47 per cent) favored a deductible feature.

Amount of deductible expense persons are willing to pay

1. Of those favoring a deductible feature five out of ten (47 per cent) were willing to pay the first \$25.00 of the cost of each illness in order to reduce their monthly premiums.

2. Three out of ten (33 per cent) favored a \$50.00 deductible.

3. One out of ten (11 per cent) favored a \$100.00 deductible.

4. Of union members who favored the deductible idea, six out of ten (57 per cent) voted for the \$25.00 deductible, compared to four out of ten (42 per cent) of nonmembers of unions.

5. The "under-\$5,000" income group favored by five out of ten (56 per cent) the \$25.00 amount compared to four out of ten (41 per cent) by the "over-\$5,000" group.

Attitude toward methods of paying benefits, payment to doctor or insured

1. Nearly eight out of ten persons (78 per cent) expressed the opinion that payment should be made directly to the doctor. Two out of ten (19 per cent) felt that the insurance or plan should pay the insured who in turn would pay the doctor.

Attitudes—favorable or unfavorable—toward Blue Shield plans

1. Eight out of ten Blue Shield subscribers (81 per cent) had a favorable opinion of Blue Shield.

2. Of the total number interviewed, six out of ten (63 per cent), when asked their attitude toward Blue Shield, expressed a favorable opinion.

3. Six out of ten union members (66 per cent) expressed a favorable opinion of Blue Shield compared to an equal number (62 per cent) of nonmembers of unions.

4. Six out of ten persons (66 per cent) of those expressing an unfavorable attitude toward Blue Shield (19 per cent), did so because of rates. People in Wayne County felt more strongly (80 per cent) on this than did out-state residents (57 per cent).

5. Three out of ten (33 per cent) of those having an unfavorable feeling, gave "poor coverage" as their reason. Two out of ten persons (18 per cent) said that "poor claim paying record" was responsible for their unfavorable attitude.

Attitudes—favorable or unfavorable—toward insurance company plans

1. Two representative companies were selected for this summary. The attitudes toward other companies were basically similar in both content and degree.

2. Company A

(a) Nearly eight out of ten Company "A" policy holders (77 per cent) had a favorable opinion of Company "A."

(b) Of the total number interviewed, two out of ten (25 per cent), when asked their attitude toward Company "A," expressed a favorable opinion.

(c) Of the total number interviewed, one out of ten (12 per cent) had an unfavorable opinion of Company "A." Sixty-two expressed no opinion.

(d) Of the total number of those persons having an unfavorable attitude toward Company "A," five out of ten (54 per cent) thought that the Company "misrepresented the policy" and five out of ten (53 per cent) believed the carrier had a "poor claim paying record." Other categories of comment were "poor coverage," "high rates," and "lack of recognition by doctors and hospitals."

3. Company B

(a) Five out of ten Company "B" policy holders (50 per cent) had a favorable opinion of Company "B."

(b) Of the total number interviewed, one out of ten (14 per cent), when asked their opinion toward Company "B," expressed a favorable opinion.

(c) Of the total number interviewed, one out of ten (10 per cent), had an unfavorable opinion of Company "B." Seventy-six expressed no opinion.

(d) Of the total number of those persons having an unfavorable attitude toward Company "B," five out of ten (56 per cent) thought the Company had a "poor claim paying record" and three out of ten (35 per cent) believed that the Company "misrepresented the policy." Three out of ten (32 per cent) gave "poor coverage" as the reason for their unfavorable attitude.

Summary of Survey of Consumer Opinion on Medical Care Protection

This survey was undertaken in order to enable a very large number of Michigan citizens to express their views on medical-surgical coverage. By means of a mailed questionnaire to more than 60,000 households, this end was achieved.

Inevitably, the accuracy of this type of survey is factored by the relatively large number of persons who do not respond. This is not the case with the Opinion Survey of Prepaid Medical Care Coverage and Related Costs—a personal interview survey where 100 per cent response is obtained through individual contact. However, the two surveys herein reported do tend to support one another in their results, although in some instances to varying degrees. When such is the case, of course, the results of the interview survey is to be given preference over the mail Survey of Consumer Opinion on Medical Care Protection.

Question 1. *Do you have any kind of insurance or plan that pays all or part of your family's medical and surgical expenses?* Nine out of ten of the respondents indicated they did have some sort of medical expense coverage. A higher percentage of urban residents were covered than rural residents, 94 per cent versus 88 per cent. When percentage of coverage was compared between the over-\$5,000 family income group and the under-\$5,000 family income group the former registered 95 per cent, the later 89 per cent.

Question 2. *Would you indicate why you and your family are not now covered by medical-surgical insurance, if this is the case?* The most frequently mentioned reason for noncoverage was "too expensive" which accounted for 41 per cent of the answers. The next reason listed by 20 per cent of the respondents was "self reliant," those who were able to cover costs on a pay-as-you-go basis. Only 13 per cent were not covered because of previous unsatisfactory experience with insurance.

Question 3. *With what medical-surgical plan or insurance company are you or your family now covered in whole or in part?* Seven out of ten of the respondents were Blue Shield subscribers. Of those having medical-surgical coverage, 84 per cent had one contract or policy, 15 per cent had two, and one person had three policies.

Question 3a. *Is any part or all of the premium cost of this policy or policies paid by your employer?* Of the total insured, about 10 per cent had all of their coverage cost paid by their employer, 50 per cent had part of the cost paid, and 49 per cent had none of the cost paid by their employer. (Note: These percentages total more than 100 because some respondents had more than one policy.)

Question 3b. *Does this plan(s) cover Self Only, Husband & Wife, of Family?* Of six out of ten of the total insured carrying family protection, 25 per cent were covered for husband and wife, and 18 per cent were covered for self only.

Question 4. *Have you ever had to call upon your insurance company(ies) to pay benefits?* In answer to this question, 76 per cent of the people said they had used their medical insurance. A greater percentage of those insured under the Family Plan (84 per cent) received benefits than those covered under Single and Couple plans.

Question 5. *The last time you used your medical insurance, were there any medical or surgical expenses that were NOT covered by your insurance?* Of the 5,138 responses to the question, 61 per cent said that there were medical expenses not covered by insurance benefits when the policy was last used.

Question 5a. *What were the medical expenses not covered by your policy the last time you used your medical insurance?* Doctor fees were the largest single item mentioned as not being covered completely by respondents' medical-surgical insurance or plan. X-ray received 19 per cent of the total mentions. Other items requiring payment, over and above insurance benefits, were maternity 8 per cent, and anesthesia and office calls, both 7 per cent.

Question 5b. *About how much did you pay in extra medical expense the last time you used your medical insurance?* Twenty-three per cent of the respondents said they paid less than \$25.00 for extra medical expense and 18 per cent indicated they paid between \$26.00 and \$50.00, and 12 per cent between \$51.00 and \$75.00. Percentages of persons paying from \$75.00 to \$100 was just under 10 per cent.

Question 6. *The benefits normally covered by many medical insurance policies for services provided in the hospital are listed below. (These do not include hospitalization expenses). Such a policy would cost your family approximately \$5.00 a month or \$55.00 per year. . . . SURGICAL, FRACTURES AND DISLOCATIONS, MATERNITY, EMERGENCY FIRST AID, ANESTHETIC, X-RAY. Which of the following benefits would you MOST like to have ADDED TO THE COVERAGE OF THE ABOVE POLICY?* Of the total respondents, 5,731 answered this key question. More than 50 per cent wished to add x-ray benefits for outpatients—this item receiving the most mentions. Next highest noted for inclusion was emergency house calls, gaining 47 per cent of the total mentions. X-ray in the doctor's office received the next highest vote with 45 per cent. No other

benefit reached the over-40 per cent mark. In almost every case, the desire for additional benefits, over and above the typical basic coverage, was relatively equal when compared between respondents whose employers paid "all," "part," or "none" of the cost of their present. For example, under the category of Medical Treatment in the Doctor's Office, respondents whose employers paid "all" of the insurance premium voted 29 per cent for the addition of surgery in the doctor's office. This compared to a 31 per cent vote by persons whose employers paid part of the premium and 29 per cent of those whose employers paid none of the premium. When responses were compared by age grouping, there was no significant difference in their desire for added services. The top four benefits compared between members of farm, labor and business and professional organizations are as follows:

	Labor Per Cent	Farm Per Cent	Business & Professional Per Cent
Emergency House Calls.....	45	21	32
Diagnostic Service (Doctor's Office)	42	18	34
X-Ray Out Patient (Hospital)	40	21	46
X-Ray Diagnostic (Doctor's Office)	36	18	39

When answers of the respondents were broken down according to income groups, those persons earning under \$5,000, percentagewise, wished to include more items than any other income group or membership group (farm, labor, or business, professional).

Question 7. *If the benefits you checked in question 6 were added to such a policy, how much increase in premium per month do you think you would be willing to pay?* The average increase that respondents indicated they were willing to pay for the benefits they had added to the original basic coverage in Question 6 was \$2.36. When average increases were taken from those persons whose employers paid "all," "part," or "none," the figures were \$2.72, \$2.10, and \$2.53 in that order. There was only a 50 cents per month difference between the lowest and highest averages of persons in the various income groups, from under \$2,500 to over \$7,000. Farm organization members were willing to pay the least monthly increase, \$1.61; labor topped the organization groups with \$2.79.

Question 8. *In order to keep down the premium cost of added benefits, would you want to drop any of the benefits normally included?* About three out of ten persons wished to eliminate some of the additional benefits originally selected. Of these items, maternity led the list with 18 per cent wishing to drop that benefit. Emergency first aid was next in line for exclusion, with 7 per cent eliminating.

Question 9. *In order to reduce the monthly cost of medical-surgical insurance would you favor pay-*

ing a deductible amount of the expense per each illness or disability (similar to deductible feature of automobile insurance)? Fifty-two per cent of those replying said "yes" and 48 per cent were opposed. Members of organizations favored paying a deductible amount for each illness, with labor being most strongly in favor, 64 per cent. Business, professional followed with 62 per cent and farm trailed with 54 per cent favoring the idea. Other breakdowns of responses according to income and amount of premium paid by employer showed little variation.

Question 9a. *If you do favor the deductible idea, how much deductible expense would you be willing to pay?* Of those favoring the deductible plan, 52 per cent were willing to pay a \$25.00 deductible amount. Thirty-six per cent favored paying a \$50.00 amount and 12 per cent preferred a \$100-deductible policy. Six out of ten of both farm and labor organization members selected the \$25.00 plan, while only four out of ten of the business, professional group did so. The under-\$5,000 income group preferred the \$25.00 plan by six to ten. Fewer in the \$5,000-\$7,000 group favored this amount and only 45 per cent in the over \$7,000 group selected this figure.

Question 10. *Should prepaid medical and surgical plans or insurance cover only the major cost items of an illness or operation, or should they cover all minor items as well?* Over 6,400 persons responded to this question, and nearly seven out of ten (67 per cent) believed that both major and minor costs of an illness should be covered. Three out of ten believed that only major costs should be covered. Complete breakdowns of the responses by income, occupation, and according to amount of premium paid by the employer showed little variation from the overall average reported in the preceding paragraph. When cross-tabulated according to organization memberships the results disclosed that the business, professional group were about evenly divided on the question. Farm Bureau respondents favored both major and minor by two to one. And eight out of ten of Labor members wished coverage for both major and minor costs.

Questions 11, 12, 13, Description of Respondents. A majority of respondents, 81.2 per cent, were males and 84.6 per cent were married. Thirty-seven per cent had no children, 40 per cent had one or two children. The majority of the sample were in the age groups between 25 and 53, with 6 per cent under 24 and 6 per cent over 64 years of age. About 20 per cent of sample resided in a city over 500,000 and equal percentage lived in a strictly rural area. Two out of ten came from towns with a population between 25,000 and 100,000 and 15 per cent from cities between 100,000 and 500,000. The most frequently mentioned family income was the \$5,000-\$6,999 group, next in order were \$2,500-\$4,999 (26 per cent) and \$7,000-\$9,999 (22 per cent).

An occupational breakdown of the respondents showed about 4 per cent retired and the same percentage of farmer and farm worker. Executive, professional accounted for about 25 per cent, white collar employees 20 per cent, and hourly-

rated workers 33 per cent. Eight per cent of the response of those belonging to organizations was in the farm group, 54 per cent, labor and 37 per cent business, professional.

Summary of Survey of Doctor Opinion on Prepaid Medical Care Plans

Respondent identification

1. Three out of every ten doctors (35 per cent) answering the questionnaire said they were in general practice.

(a) Another third of the respondents were about evenly divided between internists (13 per cent) and surgeons (12 per cent).

(b) The remaining four out of each ten were identified with seventeen other specialties.

(c) Three out of ten (33 per cent) live in cities of over half a million population.

(d) Less than one out of ten (6 per cent) live in cities of less than 2,500 people.

(e) The other six out of ten were evenly divided in cities of 2,500 to 24,999 (19 per cent), 25,000 to 99,999 (21 per cent) and 100,000 to 500,000 (21 per cent).

2. Eight of every ten doctors (80 per cent) participate in at least one of the two Blue Shield contracts.

(a) Seven of those eight (68 per cent) participate in both Blue Shield income-limit contracts.

Administration and supervision

1. More than seven out of ten doctors (75 per cent) believe that the profession is qualified to solve the economic problems in present-day medical practice.

(a) The physicians over age 54 express a slightly higher (82 per cent) degree of confidence in this respect.

2. When asked who should administer the major medical and surgical prepayment plans in Michigan, three out of ten (33 per cent) specified, "qualified laymen retained by the medical profession," another three out of ten (30 per cent) said, "the medical profession itself," and three more out of the ten (28 per cent) said the medical profession and the commercial insurance companies should offer policies on a competitive basis.

(a) Less than one of the ten (8 per cent) believe that the field should be dominated by the insurance companies alone.

(b) Less than 1 per cent indicate a combined preference for governmental agencies and labor unions (.5 per cent and .4 per cent respectively).

3. More than six out of every ten (64 per cent) doctors believe the profession is not presently given sufficient voice at the local level in the determination of Blue Shield policy.

(a) Only five out of ten (50 per cent) believe the same is true on the state level.

(b) When this was broken down into age groupings, it was revealed that less than six out of ten (54 per cent) in the "over-54" group are dissatisfied with present conditions on the local level. Only four out of ten (43 per cent) in this same age group believe the same is true on the state level.

(c) Of all the doctors expressing dissatisfaction with present policy-making on the local level, half of them (49 per cent) indicate that more voice should be given to county medical societies.

(d) Four out of these ten (41 per cent) believe more voice should be given specialty groups.

(e) On the state level only four out of ten (43 per cent) favor increased consideration to county medical societies, and nearly half (46 per cent) say that specialty groups should have more voice in Blue Shield policy-making.

(f) On both the local and state levels less than one in ten (7 per cent) indicate a desire to see more voice on policy matters vested in the hospital staffs.

(g) All of these replies were then sorted according to home town population. In cities under 100,000 about six out of ten (59 per cent) favor the county medical societies and three out of ten favor the specialty groups. In cities over the 100,000 figure only three out of ten (32 per cent) indicated the county medical societies as their principal choice, and six out of ten (59 per cent) favor giving more voice to the specialty groups.

(h) The widest departure from an even balance in this respect was indicated in returns from cities having less than 2,500, more than eight out of ten (84 per cent) favor more voice given to county medical societies, as opposed to only one out of ten (15 per cent) designating the specialty groups.

4. Seven out of each ten respondents (73 per cent) believe that the Blue Shield Board of Directors should continue to be elected by the MSMS House of Delegates.

(a) Only in the "over-50" age group did this percentage vary, and in this case it increased to eight out of ten (80 per cent).

(b) Of the 27 per cent who did not believe the Board of Directors should continue to be elected by the House of Delegates, six out of ten respondents (61 per cent) feel such election should be a function of county medical societies.

SUMMARY

- (c) Two out of ten (17 per cent) indicate specialty groups, and the remaining two out of ten are equally divided between hospital staffs (8 per cent) and councilor districts (8 per cent) in their choices.
- (d) Preferences were broken down into population groupings. In cities of under 100,000, seven out of ten "votes" (70 per cent) were for county medical societies with one out of ten (13 per cent) indicating the specialty societies.
- (e) In cities of over 100,000, only six out of ten (61 per cent) indicated the county medical societies, while two out of ten (22 per cent) favored the specialty groups.
- 5. Six of every ten doctors (60 per cent) believe that the Board of Directors of Blue Shield should include representation from groups other than the medical profession.
 - (a) This ratio changed little when broken down into age groupings. Only in the "over-54" group did this drop, and in that instance to about five out of ten (54 per cent).
 - (b) Nearly eight out of ten (76 per cent) believe that management should be represented on the Board of Directors.
 - (c) Seven out of ten doctors (71 per cent) believe that labor should also be represented.
 - (d) Oral surgeons and osteopaths are the next choices, with 18 per cent and 17 per cent, respectively.
 - (e) One in ten (11 per cent) indicate they believe state government should be represented.
- 6. When asked whether some supervisory controls should be placed over the rendering of medical care under insurance or service plans, eight out of ten doctors (79 per cent) said, "yes."
 - (a) More than half of these (53 per cent) state that such controls should be exercised by representatives of the medical profession.
 - (b) About four out of ten (45 per cent) say a combined board of lay persons and doctors should handle such controls.
 - (c) Less than 1 per cent believe that governmental agencies should perform this supervision.
 - (d) In answer to, "Where should the controls be exercised?" four of ten (38 per cent) say, "On the doctor," three (32 per cent) say "On the hospital," and three (30 per cent) say "On the patient."
- 7. Blue Shield utilization committees on the community level are favored by seven out of ten doctors (75 per cent).
 - (a) Little variation from this ratio was found when these replies were sorted according to population, age and "generalist-specialist" groupings.
 - (b) Six out of ten doctors (59 per cent) believe that such a committee should be a standing function of county medical societies.
 - (c) Three out of ten (34 per cent) say hospital staffs should have that responsibility.
- 8. More than four out of ten doctors (44 per cent) object to the present necessity of asking their Blue Shield patients about their income status in order to make proper charges to under-income patients.
 - (a) More than seven out of ten (73 per cent) doctors say they would not object to having their Blue Shield patients sign "claim forms," and 90 per cent of these say they would not object if their patients were required to indicate their income status on the doctor's reporting form.
 - (b) Six out of ten replying doctors (61 per cent) want Blue Shield to inform the doctor of the income category of the patient, such as with varicolored cards.
- 9. As reported under the heading "payment for services" later in this summary, the doctors were asked to give their opinions regarding Blue Shield policy as related to osteopaths. The 412 physicians who, by their answers to that broad question, indicated that osteopaths should be permitted to become participating physicians (two out of each ten answering the question), were then asked whether they thought osteopaths should be represented on the Blue Shield Board of Directors. Of that number, nearly eight out of ten (76 per cent) agreed that they should.
- 10. Slightly less than half (48 per cent) of the doctors believe that Blue Shield subscribers should be provided with rosters of participating doctors, even if such could be done ethically.
 - (a) This was broken down by population groupings, where highest approval of such a proposal, six out of ten doctors (60 per cent), was found in the "less-than-2,500" group and the lowest ratio was four out of ten (44 per cent), found in the "25-34" group.
 - (b) Five out of ten (53 per cent) in the "over-54" group approved.
- 11. Seven out of ten doctors (72 per cent) say that they would actively oppose the institution of closed panel types of practice in their community, such as is currently being undertaken in Detroit.
 - (a) Two out of ten doctors (17 per cent) say they would ignore it.
 - (b) One out of every twenty-five doctors replying (4 per cent) state they would join and support such a plan, if proposed in their community.
 - (c) This question was sorted into population groupings and by type of practice.
 - (d) The percentage of those who would oppose such a plan remains about the same in all size cities, except in the "100,000-500,000" ones, where it increases to eight out of ten (79 per cent).
 - (e) The largest areas of support for such plans lie in the "under-2,500" (5.8 per cent) and the "over-500,000" (5.7 per cent).
 - (f) The ratio of opposition and support for such plans, when broken down into generalists and

specialists, remains the same as on the over-all level.

12. Four out of ten doctors, (39 per cent) believe that the medical profession, through Blue Shield, should not contract with the government to supply coverage for special groups, such as with Medicare.

- (a) Three out of ten (28 per cent) believe they should, but only on the state level.
- (b) Two out of ten doctors (23 per cent) think such contracts should be on the local level.
- (c) One out of every ten (10 per cent) prefer the federal level for such contractual arrangements.

13. Six out of ten physicians (59 per cent) favor increasing MSMS dues, if necessary, to provide for means and facilities to carry on continuous economic studies on health insurance and allied matters.

Service vs. indemnity

1. Two out of ten physicians (17 per cent) believe that the Blue Shield's medical service principle should be available only to low-income groups, with income less than \$5,000.

- (a) Eight out of ten (83 per cent) do not believe that the service principle should only be available to those low income categories.

2. Four out of ten doctors (41 per cent) stated that Blue Shield should be a service company.

- (a) Less than two out of ten (16 per cent) believe it should be an indemnity company.
- (b) More than four out of ten (43 per cent) did not indicate their preference between the two types of operations.

Changes in contracts

1. More than four out of ten doctors (43 per cent) indicate that Blue Shield should offer a contract that would include all professional services rendered by any doctor of medicine.

- (a) When this was sorted by type of practice the same ratio of generalists, four out of ten (43 per cent), agreed with the total group.
- (b) The specialists were a little less inclined to agree (42 per cent).

2. The doctors were asked whether they believe benefits for medical consultations should be covered in Blue Shield contracts. These replies were sorted by type of practice.

- (a) On the over-all compilation more than seven out of ten (74 per cent) feel that they should be.
- (b) Fewer of the generalists, as a group, concur (88 per cent).
- (c) More of the specialists, as a group, agree that they should be (78 per cent).

3. The doctors are divided about half-and-half (51 per cent and 49 per cent, "yes" and "no") on whether the present twenty-four-hour limitation on first aid treatment should be increased.

- (a) Of the doctors who do favor an increase, six out of ten (62 per cent) recommend it be changed to forty-eight hours.

(b) Three out of those ten (32 per cent) feel it should be increased to "over 48 hours."

(c) Less than one out of ten (6 per cent) indicate a preference for a thirty-six hour limit.

4. Four out of ten (42 per cent) doctors think Blue Shield should not offer hospitalization coverage on an indemnity basis in addition to the present medical service coverage.

(a) More than three out of ten (33 per cent) feel it may possibly be advisable in the future.

5. Seven out of every ten (70 per cent) physicians do not believe that Blue Shield should arrange agreements with insurance companies, enabling them (Blue Shield) to offer the subscriber life, disability protection, and other types of insurance with the present service policies.

6. Little more than half (55 per cent) of the doctors believe Blue Shield should develop a variable premium system whereby high-utilization subscribers would be up-graded into a higher rate bracket.

7. More than seven out of ten doctors (72 per cent) agree that Blue Shield should provide "policy riders" in addition to the basic contracts, at specific extra rates for the additional coverages.

8. Eight out of ten doctors (82 per cent) believe that Blue Shield should offer separate contracts, in addition to "full-pay policies," as deductible or co-insurance policies.

9. In reply to whether Blue Shield should institute a system for post-payment for excessive major medical expenses whereby Blue Shield would pay the additional costs to the doctor and subsequently be repaid by the subscriber by an additional premium over a period of time, a little less than half of the replying doctors (49 per cent) said, "yes."

Income limits

1. Three out of ten doctors (32 per cent) indicate satisfaction with the present \$5,000 fee schedule and would continue to accept it in full payment for services to under-income subscribers.

(a) Less than one in ten (7 per cent) would like to see the income limits raised, but desire to see the fee schedule remain unchanged.

(b) Six out of ten doctors (60 per cent) recommend raising the fee schedule as well as the income limits.

(c) When these replies were sorted according to population groupings, this pattern followed the same general ratio.

2. More than three doctors out of ten (34 per cent) say that Blue Shield should add a \$7,500 contract to the two now being offered the public.

(a) Two out of ten (19 per cent) believe that only a \$7,500 contract should be offered.

(b) Two more out of the ten (19 per cent) favor only the \$5,000 contract.

(c) The other three of the ten are divided between offering just the present \$2,500 one,

a new \$10,000 one (15 per cent) and something else, unnamed in the replies.

d) When these figures were sorted according to population groupings, all areas followed the pattern generally, except the "under-2,500" group, where nearly five out of ten (46 per cent) favored the issue of all three contracts, and only one in ten (13 per cent) felt only the \$5,000 one should be offered.

3. Seven out of ten doctors (68 per cent) favor placing the income limit in a new contract at \$7,500, providing the present \$5,000 fee schedules are raised by 32 per cent and used as the \$7,500 fee schedule.

4. Seven out of ten doctors (70 per cent) believe the present \$2,500 contract should not be eliminated from Blue Shield offerings.

5. Nearly six out of ten (56 per cent) do not believe that the \$2,500 contract should be continued as an indemnity contract, as basic coverage or larger-income groups.

Payment for Services

1. Half of the doctors (49 per cent) replying to the questionnaire state that if Blue Shield were to add outpatient diagnostic benefits to its contracts, such benefits should be paid for when treatment is given in any doctor's office.

(a) Four out of ten (38 per cent) suggest that payment be made only when treatment is in hospital outpatient department and in certified laboratories.

(b) The remaining one out of ten respondents (14 per cent) would stipulate payment only when treatment is in the hospital outpatient department, and not in certified laboratories.

(c) There was little deviation from this ratio when these figures were grouped by type of practice.

(d) More than two out of ten doctors (24 per cent) list "x-ray, diagnostic" as the most important category of service to be paid for in any expansion of service benefits.

2. Four out of every ten doctors (41 per cent) do not believe that the "income limits" in the Blue Shield contracts should be dispensed with and a standard premium charged with a standard fee paid.

(a) Nearly three out of ten (27 per cent) feel the opposite.

(b) Nearly two out of ten (16 per cent) say "no," if no additional charge is permitted by participating doctors."

(c) 12 per cent say "yes, if a higher scale of fees is paid to the specialist."

(d) The greatest departure from this pattern of answers occurred when the replies were broken down by type of practice into generalists and specialists categories. Compared to the 12 per cent average of both groups, only 2 per cent of the generalists and 18 per cent of the specialists said, "yes, if a higher scale of fees is paid to the specialist."

3. When the doctors were asked if they would object to reporting their total charges for each case on the service report, eight out of ten (83 per cent) said, "no."

(a) This was sorted by population, age and type of practice groupings, and little deviation was noted from the average pattern.

4. More than six out of ten doctors (63 per cent) believe that the most important factor in their determination of their fees is, "the usual fee in the community as representing the value of the services rendered."

(a) Two out of ten doctors (21 per cent) say that "their personal evaluation of their professional ability" is the basis for setting their fees.

(b) The "economic potential of the patient to pay" is third with 14 per cent of the doctors indicating it as their determining factor.

(c) The "physician's years of experience in practice" is used by less than 3 per cent of the doctors as a basis for determining charges.

(d) When these figures were sorted by population, age and type of practice groupings, there was no outstanding deviation from this ratio.

5. More than six out of ten doctors (65 per cent) believe that Blue Shield fee schedules should be raised on a selective basis.

(a) Two of the ten (23 per cent) believe that they should be raised on a certain percentage basis across the board.

(b) One in ten (13 per cent) believe they are reasonable now.

(c) When these figures were sorted by population groupings the "under-2,500" cities reflected a 2-out-of-10 (21 per cent) ratio of doctors who feel fees are reasonable now.

(d) In the "over-500,000" cities, this dropped to less than one in ten (8 per cent).

6. Seven out of ten doctors (69 per cent) believe that Blue Shield should adjust its premiums and fee schedules as living costs vary.

(a) These figures were broken down into age groupings, but no general deviation from this ratio was indicated.

7. Four out of ten doctors (42 per cent) advocate a difference in fees to be paid by Blue Shield to generalists and specialists for the same category of treatment.

(a) When these were sorted by type of practice, only one generalist in ten (10 per cent) indicated that different fee schedules should be paid.

(b) Six out of every ten specialists (60 per cent) believe there should be a difference.

(c) Of all the doctors who think there should be a difference in fees, three out of ten (33 per cent) state it should be a flat 15 per cent increase to the specialist.

(d) Two out of each ten doctors (18 per cent) believe the increase should be 10 per cent.

(e) Three out of ten (33 per cent) believe that

some other arrangement beside a straight percentage should be adopted.

- (1) Of this number (e., above) three out of ten (29 per cent) state that the fee schedules should be raised on a uniform basis, on recommendations of the specialty boards.
 - (2) Two out of each ten (24 per cent) in this group believe fees should be raised, on a flexible basis, according to the skill, training and personal evaluation of the worth of the individual physician.
 - (3) One in each ten (11 per cent) in this group believe that the fee schedule adjustment should be flexible, according to the complexity of the treatment of the patient.
8. Three out of ten doctors (29 per cent) believe Blue Shield payments should be based on "no income limits, no fee schedules, with full payment to subscribers providing fees paid to doctors were in accordance with a satisfactory Relative Value Scale (like California's) adopted by county medical societies."
- (a) Five out of ten doctors (51 per cent) are equally divided in opinion for "fee schedules as an indemnity against the doctor's charge with no guarantee to the patient that benefits would cover the entire cost" and "fee schedules consistent with specific income levels."
9. Eight out of ten physicians (82 per cent) believe that assisting surgeons should be paid under Blue Shield contracts, if the patient knows of the payment.
- (a) When these figures were sorted by type of practice, nine out of ten (92 per cent) of the generalists felt this should be done.
 - (b) More than seven out of each ten specialists (75 per cent) agreed.
 - (c) Nearly half of those responding (47 per cent of the replies) indicate that payments should be made only if done in hospitals; and more than three out of ten (35 per cent) feel that payment should be made only if the work is done in hospital which has no interns and residents.
 - (d) When the question was asked, "How should the fees be determined?" four out of five (42 per cent) said, "Separate allowance for the assisting surgeon based on a percentage of the surgical fee paid to the surgeon in charge."
 - (e) Nearly four out of the ten (37 per cent) answered, "separate allowances for the assisting surgeon on a flat rate based on major and minor surgery."
10. More than five out of ten doctors (53 per cent) say that their income has been increased by Blue Shield.
- (a) Four out of ten (43 per cent) feel that their income has not been affected by it.
 - (b) Four per cent of the doctors state that their income has been decreased by Blue Shield.
 - (c) In the "under-2,500" cities, six out of ten doc-

tors (61 per cent) feel Blue Shield has increased their income.

- (d) In the "100,000-500,000" cities, sentiment is about half-and-half between an increase and a decrease of income, but *no doctor* from that size city said, "My income has not been affected by Blue Shield in any way."
 - (e) When broken down into age groupings, these figures show that in the "25-34" segment, only four out of ten (40 per cent) have benefited with increased income, and in the "35-54" group nearly six out of ten doctors (58 per cent) have gained because of Blue Shield.
 - (f) Generalists report a slight edge in this respect over specialists.
 - (g) When asked to give the reason for the increase of income, five out of ten doctors (51 per cent) say it was because of better collections.
 - (1) Less than one in ten (7 per cent) state it was because of additional patients.
 - (2) Four in ten (38 per cent) say "both."
11. Eight out of ten doctors (81 per cent) believe their colleagues are to some extent dissatisfied with Blue Shield fees.
- (a) Only in the cities of 100,000-500,000 size does this ratio change, where it amounts to more than nine out of every ten (95 per cent) feeling so.
 - (b) When asked for comment, the most frequently mentioned (by 14 per cent of the respondents) was a listing of particular, individual procedures that should be raised. (Refer to the chart section in a later part of this report for a more complete breakdown.)
12. Five out of ten doctors (52 per cent) believe that where service is rendered by a non-participating physician, the Blue Shield payment should go directly to the doctor.
- (a) More than three out of ten (33 per cent) feel that payment should go to the patient.
 - (b) The remainder say that no payment should be made for services rendered by any non-participating doctor.
13. Three out of ten doctors (30 per cent) believe that osteopaths should continue to be paid by Blue Shield under the same system as is now being used.
- (a) Slightly fewer (28 per cent) say that osteopaths should not be paid by Blue Shield.
 - (b) Fewer still (26 per cent) think that the patients of the osteopaths should be paid, instead of the treating physicians.
 - (c) These figures were sorted according to population and age groupings. The age of the respondents made little difference in their opinions on this question.
 - (d) No deviation in ratio was noted in the population groupings except in the "100,000-500,000" cities. Here less than two out of ten (15 per cent) feel that Blue Shield should

continue to pay osteopaths as they do at present.

(e) One out of ten (12 per cent) say osteopaths should not be paid at all.

(f) About five out of ten (47 per cent) state the osteopath's patient should be paid directly.

14. Six out of ten (60 per cent) doctors believe that Medicare should continue as a plan where fees paid are in full payment for the eligible services.

(a) Four out of the ten (40 per cent) believe it should continue as a plan where the fees paid are indemnity benefits toward the doctor's charges for eligible service.

Public relations:

1. Eight out of ten doctors (81 per cent) believe that Blue Shield is providing a satisfactory service to the public at large.

(a) Five of those eight also believe that Blue Shield's service can be improved, though.

(b) Two out of ten believe Blue Shield is not providing a satisfactory service to the public.

2. Nearly six out of ten physicians (57 per cent) believe that the public is not entirely satisfied with the job Blue Shield is doing at present.

(a) More than three out of ten (35 per cent) believe the public is satisfied.

(b) These figures were broken down by population groupings, and no great deviation from this ratio was evidenced in different size cities.

3. Nearly seven out of ten doctors (67 per cent) believe that the Blue Shield subscribers are satisfied with the job Blue Shield is presently doing.

4. About seven out of ten doctors (67 per cent) believe that it would be a good idea for Blue Shield to notify the patient of the amount of money paid the doctor.

(a) This was sorted by population groupings. In the "under-2,500" cities six out of ten doctors (63 per cent) agreed; in the "over-500,000"

cities seven out of ten doctors (70 per cent) felt this was a good idea.

5. Three out of ten doctors (29 per cent) believe that Blue Shield coverages and policies are sufficiently understood by the public.

(a) About one in ten (12 per cent) believe that the subscribers understand Blue Shield.

(b) More than five out of ten (54 per cent) believe that the medical profession understands Blue Shield.

Blue Cross

1. Nearly nine out of ten doctors (86 per cent) feel that some nature of supervisory control over the utilization of Blue Cross is necessary.

2. More than seven out of ten physicians (72 per cent) do not believe the doctors of medicine are given sufficient voice in the determination of Blue Cross policies at the local level.

(a) Six out of ten (64 per cent) think this same situation is true on the state level.

(b) Eight out of ten (82 per cent) in cities of under 2,500 agree with this, on the local level; while nearly eight out of ten (79 per cent) think the same with respect to the state level.

(c) Of the doctors who are presently dissatisfied with the voice given the medical profession on the local level, more than six out of each ten feel that more voice should be given the county medical societies.

(d) On the state level, this figure drops to exactly six out of ten (60 per cent).

(e) Nearly the same percentages of doctors on the local as well as on the state level feel that hospital staffs should have more voice in Blue Cross policy (15 per cent and 13 per cent, respectively).

(f) Nearly twice as many doctors think that the Michigan State Medical Society should have more voice on the state level than on the local level (19 per cent and 12 per cent, respectively).

Summary of Survey of Related Studies on Prepayment of Medical Costs

Surveys relating to the general subject of prepaid medical care plans, their coverages and costs, as well as surveys, revealing the same information on insurance, were obtained and reviewed. Of the twelve surveys which have been made in recent years in the United States, six contained information relating particularly to the subject involved in the total Opinion Study of Prepaid Medical Care Plans. The conclusions and analyses of these six surveys are contained elsewhere in this report. The following paragraphs are merely selected bits of information extracted from the more lengthy conclusions, to give a more concise picture of what others have found to be true when they investigated somewhat the same opinion areas as does this

study. This study cannot and did not go behind those surveys reviewed herein to evaluate their accuracy or relative authenticity.

Findings—general

There is a deep interest by physicians in the whole question of health insurance.*

Health insurance is growing and consumers are fairly ready to go along with this growth. In urban areas 70 per cent of the families are enrolled in some type of health insurance, and on farms, the figure is 45 per cent.

*Throughout this summary the term "health insurance" is used as meaning any type of prepaid medical-surgical care coverage device.

Seventy-seven per cent of the families with health insurance purchased it through their work or through another employee group.

Findings—coverage

The public feels that health insurance is increasingly essential and basic, whether it is something to buy or as a legitimate social or occupational benefit. They are uncertain about the most desirable directions in which it should go. The people feel that present coverage seems adequate, especially when compared with the idea of having none at all. So consumers are not very vocal in demanding more coverage. However they do have various wishes, expectations and demands for having more of their health obligations insured. These are usually oriented toward having more of the doctor's bills paid, various specific increases and services, and toward more sharing of the burdens of drawn-out illnesses.

According to almost half of the physicians the main scope of benefits which should be offered by health insurance should be medical and surgical care in the hospital, and only a slightly smaller percentage feel that medical and surgical benefits should be confined to surgery only in a hospital. Generally speaking, general practitioners are more in favor of coverage anywhere while specialists tend to favor coverage for in-hospital services only.

Findings—financial

A deductible plan arouses mixed feelings; it is both attractive and doubtful, in the eyes of the public. Coinsurance (a plan wherein the subscriber pays a certain percentage of the expense each time the plan is used) sounds sensible and rewarding because it promises to assume a large portion of some vast expense.

Most physicians believe health insurance should cover only a "substantial portion," rather than the entire doctor's fee. Over 81 per cent are willing to accept insurance benefits as full payment of fees on behalf of the low income group, but less than 20 per cent are willing to do so for all insured patients, regardless of income.

Most physicians find that their patients assume that insurance payments will cover the entire professional fee. Major reasons for this misunderstanding are considered to be unclear policy statements, lack of satisfactory explanation by the salesman, and lack of comprehension by the insured.

The question of extra fees over and above the Blue Shield schedule (in Michigan, and perhaps elsewhere) is a serious and annoying one to many people and constitutes a major problem. The average policy holder does not understand his contract and nearly always expects more than the contract provides. An extra charge above the Blue Shield contract frequently begets more ill-will than it could possibly be worth. Unless there is an advance understanding the patient is apt to be annoyed and distrustful. On the other hand,

physicians often think the fee schedules are unrealistic and are upset when extra fees are not available or forthcoming. Medical societies recommend frank discussion of fees in advance with the patient to prevent complaints.

The total charges for all private personal health services in a single year (1955) were \$10.2 billion, divided percentagewise as follows: physicians, 37 per cent; hospital, 20 per cent; medicines, 15 per cent; other medical goods and services, 13 per cent; and dentists, 16 per cent.

The percentages of charges covered by insurance were as follows: hospitals, 50 per cent; all physicians, 13 per cent; surgery, 38 per cent; obstetrics, 25 per cent. Insured families received an average of \$45 each in benefits from insurance, covering 19 per cent of charges for all personal health services. The lower the income among families with insurance, the higher was the proportion of charges paid by insurance.

One-half of the families incurring charges for surgery and receiving insurance benefits had over 75 per cent of the charges paid by insurance, and one-half had less than 75 per cent paid by insurance. In like manner, one-half of the families incurring physicians charges for obstetrics and receiving insurance benefits had over 60 per cent of the charges paid by insurance, and one-half had less than 60 per cent paid by insurance.

Findings—types of plans

The plans with which the majority of physicians are in agreement as being most satisfactory to them are Blue Shield, private insurance, and consumer-sponsored cooperative plans, in the order named.

Almost three-fourths of the physicians are participating in some plan, with the highest percentage of participation by physicians in areas where combination service-indemnity plans predominate, and the lowest percentage where cash indemnity plans are most prevalent. The main reason given for not participating, by those physicians who do not, is lack of opportunity for participation in their area.

A majority of physicians believe that health insurance should be underwritten by all agencies on a competitive basis, and they feel that the medical profession should be represented by at least half the policy-making body of any plan approved by a medical society.

Of the organizational types of voluntary health insurance plans in the United States as of December, 1956, twenty-three were cash indemnity plans, twenty-eight service plans (full payment) and fifty-eight combination service-cash indemnity plans. Of the voluntary health insurance plans as of December 31, 1956, enrollment by type of benefit showed 29.8 per cent in cash indemnity plans, 2.6 per cent in service plans and 67.6 per cent in combination service—cash indemnity plans. (Blue Shield in Michigan is in the combination service-cash indemnity plan category.)

Auricular Septal Defects

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THE MANAGEMENT of interauricular septal defects begins with recognition.

My reaction to many of these very technical presentations of heart defects often times is of complete deference to the excellence of the work, but how did all the patients so diligently studied get to the investigators in the first place? These babies and children were delivered and examined by physicians a number of times. Who first thought it was the heart that produced the subtle or manifest deviation from the normal course of this infant or child? How did he pick this patient out of his many others as a candidate for extensive technical investigation? It seems to me that this aspect of congenital cardiac defects has too often been lost in the fabulous picture of definitive diagnosis and surgical correction. The doctor on the firing line every day, the one who picks out the occasional misstep in the passing parade and earmarks him for cardiac workup, is tremendously important. This becomes especially important when the defect is extreme and manifests itself in early infancy.

What do we look for in examining a small infant or child? What makes us suspect this difficulty is of cardiac origin?

Tachycardia has been a very important early finding. One should expect a normal baby two or three days after birth to have a resting pulse below 125 per minute. A resting heart rate above this should arouse suspicion. Certainly, at several months of age, a rate above 125 per minute in an afebrile patient deserves rechecking and investigation.

Difficulty with feeding is a common early symptom. The act of sucking represents the greatest exertional load placed on a small infant. It is during this period that often the first signs of difficulty appear. Long resting periods during a feeding, twenty-five to thirty minute feeding periods, refusal of a complete formula, dyspnea and excessive perspiration during feeding, ex-

haustion following feeding, increasing vomiting—all these are characteristic of cardiac difficulty in the young patient.

Another common early complaint is rapid respiratory rate, noted particularly during sleep. Grandma may come up with this, along with her fifteen other comments, after several turns at baby sitting. Rapid respirations are usually accompanied by excessive perspiration, just as feeding may be.

Probably the most frequent early finding in a baby with cardiac difficulty is slow, poor weight gain. It may not be the first finding in many instances, but almost invariably presents itself. The practice of placing babies on a weight-height grid has led many of us to suspect difficulty when the other signs were not present or ignored.

Repeated respiratory infections are frequently observed in various types of congenital defects. Many of our young infants are first seen because of severe bronchitis or bronchopneumonia. The underlying cardiac defect is discovered subsequently. Also, in the young baby, the symptoms of cardiac failure are often mistaken for pulmonary infection.

I have not mentioned murmurs as an early finding in congenital heart disease. In the early postnatal weeks, murmurs due to incomplete and temporary extrauterine circulatory adjustments may be misleading. Later, the presence of a loud rasping murmur is a positive clue to an underlying defect, but unfortunately this occurs rarely. Equally unfortunate is the fact that many infants with congenital heart disease have no murmur in the first several weeks of life, but as pressure readjustments take place a significant murmur may become audible.

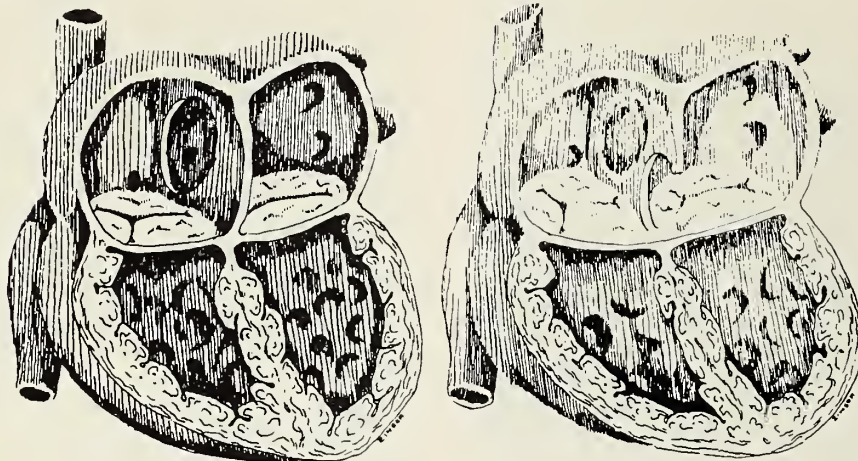
One of the more common causes for suspecting a cardiac anomaly in the nursery is cyanosis. However, most of the babies I see because of cyanotic episodes represent pulmonary problems, primarily—some with superimposed central nervous system involvement. One should keep in mind that cyanosis due to a heart defect rarely waxes and wanes, usually is not improved by

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placing the patient in oxygen, and gets worse on crying. Although these findings in infancy are those of cardiac disease in general, they may also

defects that do not involve the tricuspid or mitral valves nor involve the ventricular septum.

The clinical course of patients with auricular



Figs. 1 and 2

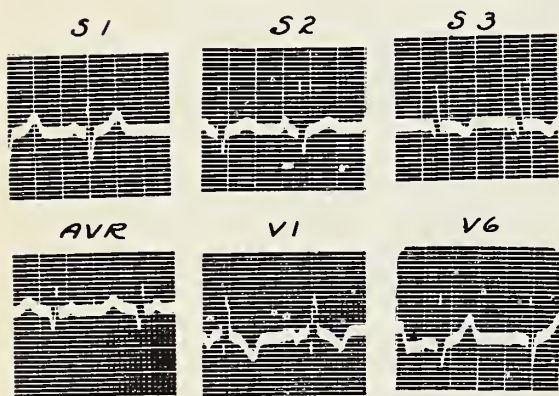


Fig. 3

be the first manifestations of an atrial septal defect.

What makes us then suspect an atrial septal defect is responsible for the patient's cardiac difficulty? What is the clinical picture of a patient with an atrial septal defect?

The so-called ostium secundum defect must be differentiated from the ostium primum defect. The secundum defect lies in the area of the fossa ovalis or upper portion of the atrial septum (Fig. 1). The primum defect lies just above the mitral and tricuspid areas, often involving both valve leaflets and in some cases the upper portion of the ventricular septum (Fig. 2). This defect is called by some persistent common atrioventricular canal. We are concerned here only with those auricular

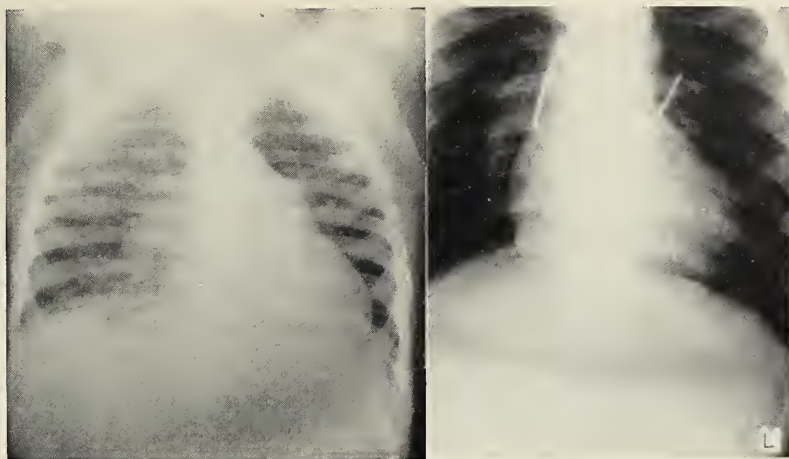
septal defects covers an enormous spectrum from heart failure in infancy to almost no symptoms even in the later years of life. Despite this variation, let us try to piece together a perhaps not too atypical picture, since space will not permit us to review the panorama of symptomatology.

Let us imagine that a patient is referred to us, and that this patient is a seven-year-old girl; two out of three atrial septal defects will be in girls. She is thin and pale but not malnourished or emaciated. Her mother is worried because she cannot keep up with other children in activities and is always having one bad cold after another. Her child just isn't as well as her other children. Perhaps she heard the referring physician mention a murmur and is worried about rheumatic fever.

Historically, we hear nothing unusual about the birth or immediate neonatal period. The infant did fairly well the first few months but did not gain rapidly, was never chubby and had several respiratory infections before she was six months old. She may have even been hospitalized for pneumonia and placed in oxygen. Recovery was complete. Had a cardiac defect been noted at this time it would have been wise to use prophylactic medication. In our patient, the second six months of the first year were characterized more of the same—respiratory infections and slow weight gain, but other patients with a septal defect may develop symptoms of severe failure in this period. Unfortunately, it is almost impossible to make an accurate clinical diagnosis at this

time. Sometime after the first year the child improved, seemed less tired, played better, ate better and even gained weight. The following

cuspid ring. It does not appear early, usually, and may be confused with the murmurs of rheumatic fever.



Figs. 4 and 5

few years were neither good nor bad. She always seemed thin and pale, less vigorous than other children, and caught cold easily. She was seen by her physician at four years, who for the first time mentioned a murmur. It would probably be of moderate intensity and up along the left sternal border. Possibly he hoped it was functional. At any rate, the mother was able to manage fairly well for a while and did not require a return visit. When our patient started school, it became evident she could not do the things the other children did. She lagged behind them in play and was short of breath on only moderate exertion. Finally, the parents brought the child back to the physician. He informs us that on examination a forceful precordial impulse was apparent at this time but no thrill. He noted a moderate tachycardia, cardiac enlargement by percussion, and normal blood pressure—or perhaps some narrowing of the pulse pressure. A soft to moderate systolic murmur was heard, high along the left sternal border, first to third interspaces. This is not a loud, rasping murmur and is thought to be due to the increased amount of blood rushing through the pulmonary artery outlet. The pulmonary second sound is slightly accentuated but definitely split. This is sometimes best heard just below the systolic murmur. In addition he heard a basilar systolic and diastolic murmur that was of varying intensity and extended toward the apex. These murmurs are thought to be due to the large rush of blood through the enlarged tri-

The doctor obtained an electrocardiogram with unipolar leads and noted a right axis deviation and an incomplete right bundle branch block, an RSR' pattern in the right ventricular leads (Fig. 3). He probably also suspected a right ventricular hypertrophy. These findings are seen in at least 90 per cent of such patients.

Fluoroscopy and x-ray revealed the results of increased blood flow through the lesser circuit. The right atrium is enlarged, it is thinner walled and more easily distended than the left. The right ventricle also was enlarged. The pulmonary vasculature was engorged and expansile pulsations were noted in the hilar vessels. The pulmonary conus was enlarged but the aortic knob remained small (Fig. 4).

The family physician's examination was most thorough and his findings coincided with ours. Catheterization under these circumstances is practically mandatory and we proceeded to do this without further delay. During the procedure we were fortunate enough to pass the catheter through the defect in the septum to the left atrium and even into the pulmonary veins (Fig. 5). In the samples taken for oxygen content, we found a definite increase in oxygenation in the specimens from the right auricle as compared with the specimen from the vena cavae. This indicated to us that arterial blood is being shunted into the right atrium.

We have now obtained sufficient evidence to warrant surgical investigation with hope of repair.

The Psychiatric Contribution to Geriatrics

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PSYCHIATRICS is the medical discipline devoted to the evaluation and management of the patient with disability. This is accomplished through the use of physical methods and the careful integration of paramedical services necessary to the psychiatric aim. In eighty-five per cent of patients, the psychiatrist needs only the assistance of the registered physical and occupational therapist. The remainder may also require speech and hearing services, medical case work skills, psychologic testing and vocational counseling.

This concept of the conscious evaluation of the abilities and disabilities of the patient is relatively modern in medical practice. The psychiatrist emphasizes the importance of the patient (the substrate) more than the disease. Both approaches are important, but physicians for generations have been disease-oriented rather than objectively patient-oriented. The art of medicine has been largely subjective.

The efficient management of the patient with long-term illness, including the geriatric patient, is only now in a developmental phase. A few years ago, as certain lay groups and physicians became interested, it was fashionable to devote a center or institute to a specific disease. More recently the concept of a center or institute to take care of general disability has become a vogue. Now the tendency is to return to the grass roots concept of medical care. Increasing numbers of hospitals are developing physical therapy departments because such treatment has become fashionable. All these approaches are necessary steps toward adequate care of the patient with long-term illness and disability.

Ideally, all the paramedical services necessary to the evaluation of the patient with chronic disease would be available to the practicing physician through the Department of Physical Medicine and Rehabilitation. This is analogous to Pathology and Radiology Departments which now offer their varied types of services to the physician. A Physical Therapy Department is not, however, a Physi-

atric Service. The former is considered a hospital service, the latter is a medical service which does include physical therapy.

To illustrate situations analogous to present trends and dislocations in psychiatric practice, it need only be remembered how very long psychiatrists struggled to get out of specialized hospitals and clinics into the general hospital and private office. It has taken men like Karl Menninger and Leo Bartemeier to convince physicians and legislators alike that patients with mental illness require medical treatment, not board and room in isolated institutional settings.

Another analogy lies in the experience of radiologists in practice thirty years. A time did exist for them when physicians felt quite competent to interpret the films taken by the technicians trained by the radiologist. That day is fortunately gone or present-day physicians would never have had the advances and advantages of the radiologic specialist available to them. Nor would the Iowa Courts only last November have judged radiology the practice of medicine. Fortunately, this decree continues the radiologist in his capacity as a medical consultant to physicians. The Radiology Department continues to function as a medical service rather than an economic function to the hospital as a "hospital benefit." At the moment, not an inconsequential number of physicians feel quite competent to use the technicians trained by the psychiatrist, and hospital fiscal officers and purchasing agents are equally as self-assured that their judgment in equipping a physical therapy department is above criticism.

These analogies are pointed out by way of introduction because one of the psychiatric contributions to geriatrics, and indeed to the medical profession, is the catalysis of the changing concept of medical management without (to quote MSMS Secretary's letter of February 18, 1957) "philosophies of practice contrary to those held by the medical profession to be most effective for the people."

There are fifteen million men and women who contribute themselves as geriatric patients today.

Presented before the Blackwell Society, March 14, 1957.

This huge number is a result of increased longevity, on one hand, and automatic retirement on the other. Whereas medicine has increased the numbers of older people in our society, our social planners have unintentionally introduced a subtle form of gericide. Persons forced into retirement do get sick and die. The geriatric patient is out of the swing of things. He is emotionally isolated and involuntarily dependent. The establishment of rapport is correspondingly difficult; but vital to successful management.

The medical and surgical problems encountered in the aging person include those in any general population and require similar treatment. However, removal from the home setting may have disastrous results. Hospitalization should be only for emergent care and never merely for the convenience of the physician and the family. Hospitalization should be terminated as quickly as possible. It is a severe psychic trauma for the older patient and at best may result in confusion which inhibits definitive care and at worst frank psychosis. The geriatric patient is similar to the pediatric patient. Both do best in familiar surroundings and with the least disturbance in routine.

There is no concrete evidence that barbiturates excite the elderly. It is possible that the administration of barbiturates coincides with the acute confusions and delirium which frequently accompanies the removal of an older person to a strange and stressful environment. Ethanol is a favorite and frequent adjunct for sedation among the aged. The newer rauwolfia and chlorpromazine derivatives have also been reported effective; but Parkinsonian syndromes are described as frequent complications. I am personally familiar with such effects in my own practice.

Improvement of the ventilation capacity is probably the most valuable contribution the physiatrist can offer to the geriatric patient. This is accomplished as follows: (1) Mobilization of periarthritic costovertebral joints; (2) hypertrophy of the expiratory musculature, ordinarily involuntary in action, but voluntarily forced in the emphysematous patient; (3) improvement of the power and co-ordination of the inspirational motors of ventilation, including the phrenic leaves. Inspiration efficiency influences the maximal breathing capacity and the residual volume with advantageous increase in tolerance to fatigue.

Asthmatic patients of long standing, the Parkin-

sonian, and the patient with rheumatoid spondylitis also deserves physiatrie review of pulmonary function, especially the ventilation phase. Cardiac Work Evaluation Clinics could advantageously use the physiatrist. Besides evaluation of the work tolerance of the patient, the tolerance may be altered by mediating specific changes in the mechanics of ventilation. It is true that measurements of the diffusion capacity of the lung are still research tools. Nevertheless, the per cent of CO₂ and its effect on blood pH, which driven below 7.4 results in confusion and stupor, are considerations in senile emphysema; and it may be possible to improve oxygen saturation during exercise through more efficient use of the musculoskeletal system. Too frequently muscles imply only their function of power. The basic metabolic role including protein metabolism and nitrogen balance, carbohydrate metabolism and the high energy phosphate bond; and the effects of muscular action on pulmonary and cardiac efficiency by way of ultimate vena cava filling is seldom appreciated in a clinically integrated fashion except by the physiatrist.

Another fascinating problem met frequently in geriatric practice is that of senile osteoporosis. It is a result of physiologic or less often pathologic nitrogen catabolism which occurs in the bedridden or, more properly, the nonweight bearing patient. When bed rest is a necessity, joint range of motion can slow down the development of negative nitrogen balance but early ambulation is the treatment of choice. Where this is not possible, standing balance through the use of the standing table or tilting bed can be useful. In geriatric practice, the cessation of gonadal activity and derangement of the adrenal corticoids contributes markedly in the development of osteoporosis. This is especially true of the postclimacteric woman. As long as balanced adrenocortical activity replaces gonadal steroids, the osteoporetic changes do not readily occur. However, with lessening of adrenocortical secretion sufficient to maintain proper ratio between male and female hormones, osteoporosis does attain significance in geriatric practice. Nilevar® (Searle) has the anabolic factor retained while reducing androgenic effect in a ratio of 15:1. It has been a most satisfactory drug in facilitating positive nitrogen balance in the aged, and, except for withdrawal bleeding in women, has produced no complications. In fact, senile changes in the skin and mucous membranes have been reversed. These include an increased turgor and oiliness of the skin

and lessened friability of the mucosa, along with the more general reversal of nitrogen balance. (Personal observation.)

A word of caution should be extended at this point to those who keep the rheumatoid arthritis on prolonged cortisone and ACTH management. This kind of steroid therapy does produce osteoporosis similar to that seen in Cushing's syndrome and may result in pathologic fractures, especially in the thoracic vertebrae. Besides the concurrent pain, pulmonary ventilation is definitely reduced. The Taylor Back Brace so routinely prescribed in pathologic fractures of the dorsal spine has the unwelcome side effect of further immobilization of the costovertebral structures and concomitant reduction in pulmonary ventilation.

Osteoarthritis is a natural senile change. By the age of forty, all of us has begun to experience this condition in our knees and in the lumbosacral joint, at least in the roentgenogram. Obesity is a contributory factor. The lumbar lordosis is increased with shortening of the lumbosacral fascia, overstretching of the gluteus maximus, shortening of the hamstrings, and contractures of the hip flexors, including the tensor fascia lata, and overstretching of the abdominal muscles. In due time there is impingement on the nerve radicle with disabling muscle spasm and referred pain. A chair back brace is the usual prescription given by consultants dealing with low back disorders. It is worthless except where active postural compensation, including weight reduction, is also included in the management. Weight reduction introduces the psychic component present in obesity, and treatment may be difficult or impossible without psychiatric assistance and/or environmental manipulation. (Social case work.)

Another symptom-complex encountered with osteoarthritis given high etiologic status is the so-called cervical spondylosis. The patient who complains of shoulder pain or restriction should never be treated simply for bursitis, even with roentgenologic evidence to support such a diagnosis. Cervical films should also be taken and the kinesiology of the cervical muscles clarified. Too often a disabling periarthrititis of the shoulder does develop secondary to an unrecognized cervical spondylosis. The treatment in the latter instance is simply heat, range of motion exercises, and cervical traction. Generally for permanent arrest, the associated compulsive, perfectionist personality must be led into more useful ways of discharging tension.

Periarthritis of the shoulder is a frequent complication of coronary insufficiency and infarction. A daily X 3 complete range of motion passively will reduce this complication in the patient with coronary thrombosis. Fully developed, the loss of shoulder rotation results in severe functional disability. This includes inability to comb, brush or set the hair, fastening or unfastening the bra, even efficient use of toilet paper. Periarthritis results in severe reduction in self care and social assurance.

Peripheral vascular insufficiency is primarily a diagnostic problem for the physiatrist. Where arteriolospasm is severe, prolonged short wave diathermy to the low back to promote reflex vasodilation is the treatment of choice. The Syncardon, which synchronizes the arterial pulse in the extremity with the cardiac systole, may prove beneficial by dilating the circular medial coat of the arteriole. It is too recent a therapeutic instrument to recommend itself, though it has theoretic value.

Amputations of the extremities, cerebrovascular accidents and degenerative neurologic conditions with involvement of the total organism, both physically and psychically, require too detailed and specific management physiatically to be discussed here. Patients with these kinds of disability are best referred to the physiatrist for management. Such patients really become psychiatric problems rather than geriatric.

Decubitus ulcers occur frequently in the older patient. Besides intensive management of protein balance including ambulation whenever possible, a daily minimal erythema dose of ultraviolet confined to the decubitus itself will promote healthy granulations. In varicose ulcers and dermatitis, histamine iontophoresis and stimulation electrically of the anterior tibial and calf muscles promotes healing by improving local blood supply and nutrition.

The treatment of fractures of the geriatric patient can be very frustrating. In those of the lower extremities, early ambulation is essential; but often the physiatrist cannot fit the timetable of the surgeon with that of the patient. The loss of vibration sense on the one hand and emotional insecurity on the other afford tremendous resistance to balancing and gait training. Also when the shoulder girdle power has been deteriorated through disuse, crutch walking will be impossible and if persisted in may result in an axillary nerve paralysis. Fractures of the upper extremities should be casted for as short a time in keeping with bone healing and

only necessary joints immobilized. Periarthritic changes and muscle atrophies occur quickly and often are not reversible despite the best physical treatment available.

Much disability could be mitigated if general hospitals would plan for longer hospital stays. There are excellent orthopedic reconstructive procedures available. These take time and, since they are "elective" surgery, the patient and the surgeon are kept apart by admission policies which are highly unrealistic. The same is true of patients who can respond with time to physiatric care. As more of us become aware of the problems to be solved in the management of chronic illness and disability including the mounting indirect costs, we will become more accepting of the apparent high direct cost of hospitalization. Then community pressures will bring about changes in present admission policies in our general hospitals. That time is still far in the future, but it will come.

When that time arrives, physicians will have become unanimously patient-oriented and the physiatric contribution will be a basic part of community organization and planning. Presently, clinicians and administrators of public health programs are busily working to solve the same problem, but from opposite angles. On the one hand, the clinician is concerned with better and more adequate care for his patient. This calls for new methods as well as extension and refining of the old. On the other hand, public health administrators are involved in various novel and untried plans to organize the community to handle long term illness. Sometimes these two basic approaches to the same problem are a source of misunderstanding and friction in the community. Only time and democratic implementation will result in improved understanding and care of the needs of our geriatric patient living with us in our changing social milieu.

CHRONIC FUNCTIONAL CONSTIPATION

(Continued from Page 1399)

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Wayne State University College of Medicine

Sixth Annual Symposium on Blood

January 18-19, 1957

FOREWORD

A Symposium on Blood is held at Wayne State University College of Medicine each year during the third week in January. It is a unique meeting where an attempt is made to be as informal as possible. Outstanding work related to recent developments is discussed. Papers are presented by investigators from all parts of the nation and usually there are some from overseas. Emphasis is placed on material commonly referred to as fundamental research. In the evening of the first day many of the participants foregather at one of the famous local restaurants for dinner and getting acquainted. The organizing committee consisted of Walter H. Seegers, Elwood A. Sharp and Paul Halick.

AN ESTROGENIC PREPARATION AND CERTAIN COAGULATION FACTORS

BY J. FREDERIC JOHNSON

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Intravenous estrogens are known to be effective for the control of hemorrhage from the upper respiratory tract, and other areas as well. An investigation was therefore undertaken to determine if there were any alterations of certain plasma factors involved in coagulation coincident with this procedure. Following intravenous administration of the estrogens in the dog and also in human subjects, there is a sharp, rapid rise in the plasma concentrations of prothrombin and Ac-globulin. Accompanying this rise, there is a fall in the antithrombin activity of the plasma. These changes would tend to enhance blood coagulation. Other factors, such as autoprothrombin I and II, platelet cofactor I, and fibrinogen, were also studied and slight changes in their plasma concentrations were noted. All the alterations accompanying the use of the estrogens persisted for several hours, paralleling the observed period of their clinical usefulness.

RELATION OF STRESS TO HEMORRHAGE AND PROTHROMBIN TIME FOLLOWING ANTICOAGULANTS

BY J. LOWENTHAL, L. M. FISHER and
L. B. JAQUES

University of Saskatchewan, Saskatoon

Rabbits were subjected to stress (insulin shock, hypertonic saline, frostbite) with and without anti-

coagulant pretreatment (Dicumarol, phenylindanedione, heparin). Pretreatment with indirect anticoagulants (Dicumarol, phenylindanedione), but not with heparin, increased significantly the incidence of hemorrhagic death compared to control groups receiving anticoagulant alone or subjected to stress only. Incidence of hemorrhagic death was found to correlate with a fall in hematocrit values. The increase in mortality from hemorrhage was found also in stressed rats when pretreated with anticoagulants. In rats, stress alone caused an increase in the one-stage prothrombin time. Addition of human serum or BaCO₃ adsorbed bovine serum to the plasma of stressed rats with a prolonged prothrombin time returned the values to normal. The failure of heparin to increase the incidence of hemorrhagic death (in rabbits) has been investigated. Heparin has been shown to interfere with some of the peripheral responses to stress.

APPLICATION OF THYMOL TURBIDITY TEST FOR THE PREVENTION OF SERUM HEPATITIS

BY E. R. JENNINGS, W. M. HINDMAN, B. ZAK,
J. REED and O. A. BRINES

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During the past 30 months thymol turbidity tests have been performed on the serum of blood donors at the Detroit Receiving Hospital and the blood has been used without regard to the results of the test. The critical level of serum thymol turbidity which has been used in this study is 8 Shank-Hoaglund units. Donors whose serum thymol turbidity value has been in excess of 8 Shank-Hoaglund units have been called "high thymol" donors. There have been follow-up examinations on 193 recipients of "high thymol" blood. In this group there have been ten cases of serum hepatitis and five cases of possible hepatitis. In the control series of 603 recipients (recipients of blood from donors whose serum thymol turbidity value was normal or unknown), there has been no serum hepatitis and two cases of possible hepatitis. These data clearly indicate that the hazard of serum hepatitis is increased if blood is used from donors whose thymol turbidity value is in excess of 8 Shank-Hoagland units. The feasibility of the use of this test for the screening of blood donors was discussed.

SPHINGOSINE DISCOVERED AS PHYSIOLOGICAL INHIBITOR OF BLOOD CLOTTING

By E. HECHT

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Two different investigations led to the discovery of sphingosine as a physiologic inhibitor of blood clotting.

1. The endeavors to separate with the help of the paper chromatography the active principle from a lipid mixture, called lipid activator. The lipid activator gives before hydrolysis with phenol-water, four positive reactions with ninhydrine; after hydrolysis with sulfuric acid, however, only three, which were identified as glutamic acid, serin and ethanolamin. By treatment of the residue from the hydrolysis with NaOH, then, by chromatographic investigation, we obtained a substance that gives a positive reaction with ninhydrin with an RF-value of 90. On the same place before hydrolysis, a positive reaction was obtained with ninhydrin and we supposed that the substance in question formed an insoluble sulfate during the hydrolysis. The eluate corresponding with RF: 90, has inhibitor activity.

2. The second investigation was to verify the assertion of Chargaff that sphingomyelins are inhibitors of blood clotting. This was indeed so, but only with sphingomyelins giving a positive reaction with ninhydrin. On the basis of their chemical formulas, this was not expected. Purified sphingomyelins, giving no positive reaction with ninhydrin were indifferent in relation to clotting. The impure sphingomyelin chromatographically investigated gave a positive reaction with ninhydrin with RF: 90, and the eluate had also a clot-inhibiting effect. After hydrolysis, the positive reaction with ninhydrin disappeared. On the ground of these observations, we concluded that the substances giving the fourth spot on the chromatogram of the lipid activator and the impurity of the sphingomyelins were the same. We began to suspect sphingosine which is closely related to several lipids such as sphingomyelins or cerebrosides. Sphingosine possesses a free NH_2 -group and forms an insoluble sulfate. Indeed, chromatographic investigation of sphingosine, prepared from physiological material (cerebron and sphingomyelin of pig brain), gave with ninhydrin the same reaction with RF:90.

The identification of the inhibiting substance as sphingosine was proved: (1) On the ground of the same RF-values with ninhydrin in consequence of a chromatographic comparison with 5 different developing solutions; (2) by the same characteristic clotting reactions with chicken plasma; and (3) by the agreement of these reactions with physiologic and synthetic preparations.

By investigations with nine different derivatives of sphingosine, it could be demonstrated that the complete molecule with the double bond and free

NH_2 -and OH-groups is required to give the following typical reaction with chicken plasma: Sphingosine, in very small concentrations prolongs the clotting time to forty hours or more. In the presence of the lipid activator we observed with sphingosine clotting times which are at most a little shorter than those with the lipid activator in optimal concentrations alone. The last named clotting times, however, are shortened to a sixth and sometimes to a tenth by addition of the lipid activator to chicken plasma incubated previously with sphingosine. This result is not obtained after incubation of the lipid activator with sphingosine so that a contribution from the plasma must be presumed.

A comparative investigation with the antithromboplastin of Tocantins, which he believes is increased abnormally in hemophilia, suggested that the essential principle of the antithromboplastin is sphingosine.

EFFECTS OF PRODUCTS OF THERMAL DENATURATION OF THROMBIN PREPARATIONS ON ACCELERATION AND INHIBITION OF VARIOUS PHASES OF COAGULATION

By EDMUND KLEIN, SIDNEY FARBER and
ISAAC DJERASSI

*From the Children's Cancer Research Foundation
and The Tumor Therapy Group of the Division of
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Medical School.*

The thermal denaturation of preparations of bovine thrombin has yielded a water soluble material which promotes the early phases of coagulation. The material does not clot fibrinogen in the manner of unmodified thrombin. In the presence of high concentrations of the degradation product, unmodified thrombin is inhibited. The degradation product which represents 4.5 per cent of the weight of the starting material is nondialyzable, contains glucosamine-polysaccharide and peptide bonds, and is precipitated by alcohol from aqueous solution. A single peak is observed in the analytical ultracentrifuge. On free-boundary electrophoresis a pattern is obtained, which resembles that of the starting material in terms of the general relation of the major peaks to each other, but the rate of migration is considerably reduced in the modified preparation as compared to that of the starting material.

The observations indicate that the activities of thrombin in the earlier phases of coagulation can be separated from its effect on fibrinogen. It is also suggested that modification of the enzyme preparation can result in a material which will inhibit the activity of the starting material.

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CINEMICROGRAPHY OF THE FORMED ELEMENTS IN THE MICROCIRCULATION

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The dynamic characteristics of the formed elements of blood have been studied *in vivo* at magnifications as great as 2000 X by means of trans-illumination applied to the thin membranous cheek pouch of the hamster and retrolingual membrane of the frog. The circulation of the formed elements is shown in normal preparations and in pathological conditions. Motion picture records have been edited for presentation of significant findings.

Extravascular components such as vasomotor nerve plexus, vascular smooth muscle, and perivascular tissue mast cells are shown as important factors which may regulate or modify the distribution of the formed elements.

The erythrocytes are shown in blood circulating through arterioles, capillaries and venules, thus providing a comparative indication of rates of flow. Adaptability to deformation is illustrated by the squeezing of individual erythrocytes passing through narrow vascular sphincters or through the endothelium during extravasation and petechial formation. Red cells often strike against portions of vessel walls, especially at "sharp corners" of branching arterioles. Changes in the flow characteristics of erythrocytes are recorded in conditions of anemia, after injection of mocassin snake venom, during adrenalectomy, and at terminus following lethal total body x-irradiation. The mechanics of petechial formation are demonstrated by the popping of red cells, one by one, through the endothelium without evidence of actual openings. The importance of the venous side of the circulation is emphasized by the vulnerable nature of venous junctions with respect to petechial formation and by the comparatively large surface area of the venules. A few hours before death from lethal irradiation or cortisone poisoning, the erythrocytes circulate in aggregates resembling "sludged blood," but the aggregates do not form occluding thrombi and break up readily at narrow capillary junctions.

The appearance and behavior of leukocytes is photographed in normal preparations and under conditions such as infection, malignancy, during anticoagulant therapy, and during infusion with dextran. An increase in adhesiveness of leukocytes to the vessel walls is documented in traumatic states and after intravascular injection of various substances such as heparin, x-ray contrast media, or dextran. The presence of coatings of immobile white cells is shown, especially in venules.

The platelets are photographed within living blood vessels, especially in eddies, stationary or slowly moving plasma, and in circulating blood near the endothelial wall at times when the flow is slow. During spontaneous rotation, the bayonet-like edges and oval surface aspect are apparent in the unagglutinated platelet *in vivo*. The role of platelets in hemostasis is demonstrated by the formation of platelet aggregates at points of injury in blood vessels. Furthermore, the mechanics of platelet thromboembolism are shown by motion pictures of the entire process.

Test procedures for susceptibility to platelet thromboembolism, vascular fragility, and bleeding tendency are demonstrated, and results are presented.

STUDIES ON THE NATURE OF THE ANTIHEMOPHILIC ACTIVITY OF NORMAL HUMAN PLASMA

By DOUGLAS M. SURGENOR and BARBARA B. STEELE
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A protein fraction which contains antihemophilic factor activity has been obtained from fresh platelet-poor human resin plasma by the following procedure. After quantitative removal of prothrombin and the other proteins which interact with barium sulfate, over 80 per cent of the AHF activity was precipitated into a fraction similar to Fraction I. This was then redissolved and treated with a high molecular weight dextran sulfate (DSO_4 —0.01 to 0.02 g/g protein). The insoluble fibrinogen— DSO_4 complex was removed, leaving a solution which contained only traces of fibrinogen but good AHF activity. On dialysis, the AHF activity precipitated with a euglobulin fraction. The product was dried and remains stable for months at -20° .

This purified AHF was free of other demonstrable clotting factors; it reduced the clotting time of hemophilic plasma, but not of plasma from a PTC deficient patient. It contained several electrophoretic components, the major component being B-globulin. At 0° , solutions are relatively stable at pH 5.5-7, but are very unstable at alkaline reactions. The activity is destroyed by heating for twenty minutes at 56° .

The behavior of this material in isolated systems confirms the activity toward hemophilic plasma. In the thromboplastin generation test it exhibits good accelerator activity with cephalin. In a thrombin generating system using human platelets or extracted portions thereof, it is active in μg concentrations. Dextran sulfate, if used in even slight excess, is strongly inhibitory, particularly in the thromboplastin generating system; considerable care must be used in carrying out the separation from Fraction I.

STUDIES ON COLD PRECIPITABLE FIBRINOGEN (CRYOFIBRINOGEN)

By HELEN I. GLUECK

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The Cincinnati General Hospital, Cincinnati*

The present studies of cold precipitable fibrinogen, "cryofibrinogen," were prompted by finding such a protein in the plasma of a patient with a congenital aneurysm of the iliac artery. There had been several attempts at surgical therapy of the lesion. At first, the aneurysm had been wrapped in cellophane. Steel wire had been threaded into the sack of the aneurysm one and three years before his last hospital admission.

Blood was collected in the usual concentration of citrate, oxalate or heparin, centrifuged and the resulting plasma stored at 4°C. A flocculant precipitate began to appear after four to six hours, increasing in amount as storage continued. On re-warming, the precipitate contained in the plasma dissolved at 37°C. No precipitate appeared if the plasma was maintained at room temperature. Serum stored at 4°C, did not contain the precipitate. The cryofibrinogen separated by centrifuging the plasma at 4°C. was washed twice with cold saline, and redissolved in saline at 37°C. It was insoluble in water at 37°. A fibrin clot formed on addition of thrombin to the solution of cryofibrinogen. The supernatant above this clot was incoagulable. Clots formed from cryofibrinogen were insoluble in 30 per cent urea. On heating the solution of cryofibrinogen at 56° for ten minutes a precipitate formed, which did not clot on the addition of thrombin. The characteristics of the cryofibrinogen resembled that noted by Korst and Kratochvel. (Cryofibrinogen in a case of Lung Neoplasm associated with Thrombophlebitis Migrans." *Blood* 10:945, 1955).

The plasma, serum and cryofibrinogen solution were studied by paper electrophoresis. The factor appeared to migrate with the fibrinogen fraction. It could be prepared as a single component by repeated washing and resuspension. Serum did not contain the factor. The cryofibrinogen was present in all samples tested preoperatively. It varied in amounts from 25 to 55 per cent of the total fibrinogen which preoperatively was quite low (160 mg per cent). Preceding, during, and following surgery the patient received 5 units of blood and 7 grams of fibrinogen. Nevertheless, shock and anuria developed following ligation of the aneurysm. The total fibrinogen rose to 310 mg per cent on the third postoperative day; of this 140 mg precipitated at 4°C. The protein disappeared on the 13th postoperative day and did not reappear after three months of observation.

Dogs were used in attempting to produce the protein experimentally. Preoperatively no cryofibrinogen was noted in one dog. It appeared

three days after wiring of the iliac artery and has persisted for ten months. A "non-wired" dog served as a control. Initially, cryofibrinogen was absent in this dog's plasma. The protein appeared spontaneously (following fourteen venesections) during the tenth week of observation. It has persisted for an additional twenty weeks. The significance of this observation is unknown.

Cryofibrinogen was not found in the plasma of twenty-one normal students.

Nineteen patients with normal pregnancies have been studied. In five, small amounts of the protein have appeared intermittently. Four pregnant patients with clinically diagnosed thrombophlebitis have been observed. Cryofibrinogen was present in considerable amounts in the plasma of all. The quantity of the precipitate and its time of appearance have not always correlated with the activity of the phlebitis. The precipitate disappeared in all four patients on the second to fourth postpartum day. In one patient with hypofibrinopenia associated with abruptio placenta, the precipitate was present during labor, but disappeared twenty-four hours after delivery.

The protein has been seen in three patients following massive hemorrhage, and in one with myeloid metaplasia.

These observations are of a preliminary nature. The origin of cryofibrinogen, its relation to previously observed "intermediate" fibrinogens, and its clinical significance are still under study.

I wish to thank Dr. Louis Herrmann and James Helmsworth for the opportunity to study this patient and for their help in subsequent experimental surgery.

RECENT OBSERVATIONS ON THE CLOTTING OF PLASMA BY COAGULASE AND ON THE NATURE OF THE COAGULASE REACTING FACTOR (CRF)

By MORRIS TAGER

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The demonstration of CRF activity in purified human prothrombin of Seegers, and the preparation of purified CRF essentially lacking in prothrombin activity, has led to studies which have sought to reconcile these apparently conflicting findings. Prothrombin has been altered to determine whether the two activities might be dissociated. It has been found that "autoprothrombin" of Seegers still exhibits CRF activity, while in essence demonstrable prothrombin function is lost. Further, human thrombin, in which presumably prothrombin has been totally converted, still possesses the ability to react with staphylocoagulase and accelerate clotting. The evidence presented suggests that the CRF activity represents a fraction of prothrombin; thus, the

intact prothrombin molecule has both functions, while the purified CRF fraction, and the prothrombin derivatives tested have only CRF activity. Studies have been continued to determine the enzymatic activity of staphylocoagulase. It has been found that purified coagulase changes the suspension stability of egg yolk. Observations carried out with Miss Margaret Drummond have indicated that this is not a lecithinase effect, but is a lipase which splits tributyrin and other similar substrates. The relation of this action to the blood clotting phenomenon is under further study with inhibitors and specific antibodies.

IMMUNOLOGIC STUDIES ON SERUM LIPOPROTEINS

BY RAY K. BROWN and LAWRENCE LEVINE
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Investigation of the immunologic relationship of the various lipoproteins may aid their quantitation and clarify their metabolic significance. Rabbit antiserum to a low-density lipoprotein of $-S_{1.063} = 5$ was studied by single and double diffusion in agar and by the precipitin and complement-fixation reactions. It was immunochemically homogeneous after absorption with human serum freed from low-density lipoproteins by ultracentrifugation. All flotation classes of low-density lipoproteins examined cross reacted with the antiserum but the high-density lipoproteins did not. This antigenic similarity implies structural similarity. It would be difficult, if not impossible, to prepare antisera for the estimation of specific classes of low-density lipoproteins.

Similar studies showed that it is difficult to prepare an immunochemically homogeneous antiserum to high-density lipoproteins. Only one of ten antisera gave one line by single and double diffusion in agar against whole serum. The recovery of added high-density lipoprotein cholesterol in the immune precipitate and the lack of reaction with low-density lipoproteins define the specificity of this antiserum. This antibody was more reactive with aged lipoprotein than fresh and provided a means of studying the changes that occur during preparation and storage. Preparative ultracentrifugation at high salt concentrations caused partial dissociation of lipid and protein, a change distinct from aging. The partially reactive protein portion became more reactive after addition of lipid. Sera from patients with xanthomatous biliary cirrhosis contain much lipoprotein reacting with antiserum to high-density lipoproteins although little such lipoprotein is present by physico-chemical studies. Perhaps the protein portion of these lipoproteins is similar to that of normal high-density lipoproteins and the increased lipid content causes altered flotation characteristics. The immunochemical distinctness of these types of

lipoproteins agrees with chemical studies of their protein portions. All low-density lipoproteins examined have similar amino acid compositions and an N-terminal glutamic acid. High-density lipoproteins have a characteristic amino acid composition and an N-terminal aspartic acid.

LIGHT SCATTERING STUDIES ON THE FIBRINOGEN POLYMERIZATION

BY ERWIN SHEPPARD
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Early work in our laboratory has demonstrated that heparin and other ionic anticoagulants will increase the electronegativity of the fibrinogen molecule's surface. It was of interest to see if this increase in electrical surface charge was sufficient in magnitude to interfere with the conversion of purified fibrinogen. Light scattering studies were done to follow the polymerization of fibrinogen in the presence of heparin as a function of ionic strength, concentration and pH. It has been demonstrated that heparin can block or retard the rate and degree of fibrinogen conversion *in vitro* due to repulsive forces. However, in the presence of serum, heparin's anticoagulant activity in our experimental system is due to the formation of antithrombin II arising from the interaction of heparin and its cofactor. The properties of the heparin-cofactor complex, and in particular, the effect of heat and ether treatments as gleaned from our studies will be described.

Using heparin as the prototype, a variety of similar polyanionic compounds has been studied. These compounds exhibit anticoagulant properties which *in vitro* are due to electrostatic forces. Evidence will be presented to show that the activation of a heparin-life cofactor can occur and that this is a function of the molecular weight of the polyanion.

ANTITHROMBIN AND HEPARIN COFACTOR FROM HUMAN PLASMA

BY CHARLES E. BRAMBEL
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Monkhouse, France and Seegers (*Circulation Research*, 3:397, 1955) have prepared potent antithrombin concentrates from heat defibrinated bovine plasma. In our studies, antithrombin with heparin-cofactor activity was isolated as a concentrate from oxalated human plasma which was partially defibrinogenated, deprothrombinized and ether extracted.

Defibrinogenation was accomplished by the cold precipitation method of Seegers and co-workers (*Arch. Biochem.*, 13:232, 1947). The defibrinogenated plasma was then adsorbed with barium sulphate to remove prothrombin and associated clotting factors. The resulting supernatant plasma

was extracted three times with equal volumes of ethyl ether containing 10 per cent ethanol for the purpose of removing antithrombin.

No antithrombin (Schaefer et al: *J. Appld. Physiol.*, 8:300, 1955) or heparin-cofactor activity was found in the residue from ether-ethanol extracts.

On standing for sixteen hours at 32° to 35° F a precipitate forms in the plasma-ethanol-ether mixture. The precipitate was removed by centrifugation. This fraction was rich in antithrombin and heparin-cofactor activity. Subsequent purification of this concentrate resulted in no separation of heparin cofactor from antithrombin activity. The successive stages of isolation were followed with electrophoretic analysis.

Antithrombin and heparin cofactor activity was demonstrated by the prolongation of thrombin times using purified fibrinogen. The activities were checked with the TAME assay (Sherry and Troll: *J. Biol. Chem.*, 208:95, 1954).

When thrombin times were used, a greater effect was noted with the addition of heparin to the concentrate. These data may suggest that additive effects are obtained or that multiple mechanisms are involved. On the other hand, heparin had no effect on the TAME assay, which is a measure of hydrolytic activity. Thus, a dual function for antithrombin suggests itself: (1) the destruction of thrombin; and (2) in the presence of heparin, interference with the thrombin-fibrinogen reaction.

The foregoing data show that heparin with its cofactor (in this case, antithrombin) interferes with the thrombin-fibrinogen reaction but does not alter the esterase activity of thrombin.

Data will be presented to show that this concentrate ("antithrombin-heparin cofactor") also interferes with the conversion of prothrombin to thrombin in human plasma. Inhibition of Ac-globulin as a probable mechanism will be presented. These findings indicate a third function for antithrombin.

REACTIONS OF A BLOOD TRANS—

$\alpha(1\rightarrow4)$ -Glucosylase

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A highly purified enzyme preparation was obtained from bovine plasma which specifically attacks terminal $\alpha(1\rightarrow4)$ linkages between D-glucopyranose residues of the amylosaccharides, maltose, amylose, amylopectin, and glycogen. Glucose is the common end product produced from these substrates. With maltose as substrate oligosaccharide synthesis also occurs. Products of the enzyme-maltose reaction, when quantitatively separated and analyzed, demonstrate one mole of glucose formed from two moles of maltose. One

of the synthetic oligosaccharides isolated was identified as amylotriase. Therefore it is indicated that maltose acts as both donor and acceptor substrate and that the enzyme functions by a trans-glucosylation process.

The enzyme does not alter diglucose compounds containing the $\alpha(1\rightarrow6)$ link (isomaltose), the $\beta(1\rightarrow4)$ link (cellobiose), the $\beta(1\rightarrow6)$ link (gentiobiose), and the $\alpha, \alpha'(1\rightarrow1)$ link (trehalose). Neither does it affect glucose-1-phosphate or the α - and β -methylglucosides. That terminal linkages of amylopolysaccharides are attacked is indicated not only by the production of glucose as the sole reducing product but also by failure of the enzyme to alter the cyclic Schardinger α - and β -dextrins.

Properties of the enzyme reactions were studied in order to establish sensitive assay procedures. Both a high molecular weight substrate (amylose) and a low molecular weight substrate (maltose) were employed. Maximum activity on amylose was achieved at pH 7.2, in 1 per cent amylose solution which was 0.05 M with respect to Ca^{++} . Under these conditions the initial reaction velocity is directly related to the enzyme concentration. This enzyme-amylose reaction is insensitive to the type of anion or the changes in ionic strength as adjusted with NaCl.

The enzyme-maltose reaction was studied manometrically by superimposing on it the glucose oxidase system, thus measuring the glucose liberated specifically. At pH 6.0 in 0.015 M maltose the initial reaction velocity was directly related to the enzyme concentration. The Ca^{++} concentration had no effect on this reaction. Michaelis constant for the maltose reaction is 0.0022 M.

Products of the enzyme-amylose reaction are different when ionic calcium is present and absent. In absence of Ca^{++} glucose is the only reducing end product while a homologous series of compounds are split from the polysaccharide with Ca^{++} present. Since Ca^{++} does not influence the enzyme-maltose reaction, the calcium is considered to reduce the high specificity of the enzyme for terminal $\alpha(1\rightarrow4)$ glucosidic linkages, allowing it to couple at other sites on the substrate. Such a mechanism for Ca^{++} action may prove valuable in understanding the function of this action in many biologic systems.

STUDIES ON ANTHROMBIN AND HEPARIN-COFACTOR

By FRANK C. MONKHOUSE
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The antithrombin potency of difibrinated plasma or serum is the result of two distinct types of action; (a) destruction of thrombin, and (b) interference with the action of thrombin on fibrinogen. In this paper, the term antithrombin

activity will be used to indicate a plasma constituent which destroys thrombin activity. The term heparin-cofactor activity will be used to refer to a plasma constituent which in the presence of heparin prevents thrombin from clotting fibrinogen. With the assumption that a better knowledge of the relationship between antithrombin and heparin-cofactor, and an understanding of the part they play in blood coagulation, can only be obtained by a study of more purified factors, we have attempted to isolate the active materials.

The original antithrombin concentrates prepared by Monkhouse, France and Seegers (*Circulation Research*, 3:397, 1955) were obtained by absorbing the active material on aluminum hydroxide and eluting with phosphate buffer. The eluate was further fractionated by ammonium sulphate. The activity was contained in the fraction soluble at 40 per cent saturation and insoluble at 70 per cent saturation with ammonium sulphate. This fraction contained mainly alpha globulins and albumins. Electrophoretic techniques have been employed in an attempt to determine which protein is most closely associated with activity. Patterns on starch and on paper indicate that both antithrombin and heparin-cofactor activities are found mainly with the alpha globulins or associated lipoproteins. The most active material has been obtained by the use of a vertical curtain electrophoretic apparatus. In terms of activity per mg. of nitrogen, antithrombin has been purified 7.5-fold and heparin-cofactor 130-fold over the concentrates prepared by ammonium sulphate fractionation of phosphate eluates.

Though this represents some progress the question of whether or not antithrombin and heparin-cofactor are distinct plasma proteins remains unanswered. Fractions with antithrombin activity but without demonstrable heparin-cofactor activity have been obtained by the use of the vertical curtain electrophoretic technique. Nevertheless, it would be unwise to conclude from these results that they are separate proteins. Many fractions contain material which inhibits the action of heparin and thus interferes with heparin-cofactor assay. Further, it has not been possible to prepare any fraction exhibiting heparin-cofactor activity which did not also show antithrombin activity.

The exact relationship between activity and lipoprotein content of the fractions has not been determined in this series of experiments. It has been observed, however, that the concentrates of antithrombin and heparin-cofactor consistently have a high lipid content. In one experiment an antithrombin concentrate was adjusted to a specific gravity of 1.063 and then centrifuged for 24 hours at 100,000 g. This resulted in sedimentation of both antithrombin and heparin-cofactor and a similar concentration of their activities. This would indicate that if the active material is associated with lipid it is most likely in the form of a high density lipoprotein.

IN VITRO, ANIMAL AND CLINICAL STUDIES ON LYOPHILIZED PLATELET MATERIAL

BY I. DJERASSI, S. FARBER and E. KLEIN

From The Children's Cancer Research Foundation and The Tumor Therapy Group of the Division of Laboratories and Research, The Children's Medical Center and the Department of Pathology, Harvard Medical School.

Lyophilized platelet material has been shown to correct increased vascular fragility and to promote hemostasis in patients with secondary thrombocytopenia due to acute leukemia and aplastic anemia. These effects were not associated with an increase of the peripheral platelet count. This suggested that platelet components could contribute to vascular integrity in the absence of intact platelets.

A number of fractions have been obtained from lyophilized platelet material. The differences in the physical chemical properties of the various fractions have been demonstrated by free-boundary electrophoresis and in the analytical ultracentrifuge. Two of these preparations contained apparently protein-bound carbohydrate. Various activities, such as antithrombin, antiheparin and antihyaluronidase have been related to different fractions.

Lyophilized platelet material and products of its fractionation have been investigated in regard to vascular fragility and hemostasis in thrombocytopenic animals.

Materials with some of the chemical characteristics and biological activities of platelet preparations have been obtained from biological sources other than platelets.

This investigation was supported by the Atomic Energy Research Contract AT (30-1) 1275 and Grant No. C-937 from the National Cancer Institute.

GENESIS OF PROTHROMBIN ACTIVITY BY CELLULAR CONSTITUENTS

BY MARION I. BARNHART

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Recently there have been two independent reports that mitochondria have the ability to generate prothrombin activity. The present study on genesis of prothrombin activity represents an attempt to define the chemical entity responsible for activity of the mitochondria. Conditions were established for obtaining high yields of prothrombin activity from an "inactive" prothrombin preparation through use of mitochondrial systems. Moreover, it was observed that cathepsin, a group of cellular proteinases, possessed the power of regenerating prothrombin activity. Preparations containing all of the cellular cathepsins as well as preparations more potent in cathepsin B and C were utilized. Cathepsin B, which is largely

localized on mitochondria, appeared to be the most effective proteinase in genesis of prothrombin activity in solutions of pH 7.5 to 8.1, the range for similar activity with mitochondrial preparations. When acid conditions prevailed, mitochondria and cathepsin accelerated destruction of prothrombin activity. Thus, the ability of cathepsin concentrates and mitochondria to inactivate prothrombin or to generate the activity from "inactive" prothrombin depends on the conditions selected. Since parallel results were obtained with mitochondria and with cathepsin in these protein reactions, it is possible that cathepsin of the mitochondrion is the active agent in generation of prothrombin activity from a precursor.

LIPIDS IN BLOOD CLOTTING

(READ BY TITLE)

BY N. K. SARKAR, G. CHATTERJEE and RENUKA BANERJEE

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Oxalated rabbit plasma coagulates when Russell's viper (RV) venom and Ca^{++} are simultaneously added to it but loses this property after successive treatments with petroleum ether (b.p. 40-60° C). This lipid-free (LF) plasma can be coagulated in the presence of brain or lung thromboplastin, because both of the materials contain a sufficient amount of lipid; thus the addition of either one of these agents is equivalent to the addition of the protein and lipid parts of the active thromboplastin molecule. RV venom is free of lipids and by itself cannot coagulate the LF-plasma.

In studying the nature of the lipid part of the thromboplastin molecule, RV venom was used as the protein portion of the thromboplastin molecule. The lipid part was replaced by purified phospholipids obtained from ox-brain, beef heart, egg yolk, et cetera, in our reconstituted system.

Among the phospholipids studied, cephalin but not lecithin, was found to induce thromboplastic activity in RV venom. Phosphatidic acid (cardiolipin) can to a great extent replace cephalin. Among the fractions of cephalin prepared according to the Folch procedure phosphatidyl ethanolamine and inositol containing phosphatide were most active. Phosphatidyl serine was a poor activator while fractions II and IV were more active than phosphatidyl serine; they were far less active than phosphatidyl ethanolamine.

Chargaff's purified lung thromboplastin, even after heating at 70-75° C for thirty minutes, was found to coagulate the LF-plasma in the presence of RV venom and Ca^{++} . Similarly, platelets either heated (100° C for thirty minutes) or unheated can coagulate the LF-plasma under identical con-

ditions. These experiments clearly demonstrate the importance of lipids in blood coagulation.

Experiments with synthetic glycerides showed that only triglycerides can replace cephalin in inducing thromboplastic activity in RV venom. Diglycerides were extremely poor activators and monoglycerides were completely inactive.

THE PREPARATION AND ACTIVATION OF HUMAN PLASMINOGEN

BY J. T. SGOURIS, K. B. MCCALL and J. K. INMAN
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We have fractionated seven lots of dried Fraction III by the procedure developed by Kline (*J. Biol. Chem.*, 204:949, 1953) and found that the potency of the final preparations varied from 12.6 to 26.6 proteolytic units (P.U.'s)/mg. N reported by Kline. In order to determine if this was due to the use of aged Fraction III, we prepared a dried Fraction III from relatively fresh, frozen Fraction II+III w paste. Upon subsequent fractionation this material yielded plasminogen with a potency of 35.5 P.U.'s/mg. N. Dried Fraction III-3 was also investigated as a source of plasminogen. It was prepared by Method 9 of Oncley, et al (*J. Am. Chem. Soc.*, 71:541, 1949), with the omission of the final lysis step. This fraction proved to be an excellent starting material for the Kline procedure. In this case, the final product had a potency of 80-90 P.U.'s/mg. N.

Plasminogen prepared by the Kline procedure from dried Fraction III was heated for ten hours at 60° C. at pH 3.5 in order to destroy possible viral contaminants. Losses in activity of less than five per cent were observed.

We have investigated the conversion of plasminogen to the active component of the fibrinolytic system (plasmin) by the following means: (1) spontaneous activation, (2) use of a placental activator, (3) streptokinase activation and (4) urokinase activation. Spontaneous activation by the method of Alkjaersig and Sherry did not occur with all preparations. Plasminogen which had been heated for ten hours at 60° C. did not show any spontaneous activation even in the presence of small amounts of plasmin. We consider the use of streptokinase undesirable because of its pyrogenic and antigenic properties. Human urokinase does not present these disadvantages. In fact, it is feasible to consider the value of a final plasmin product containing an activator. We have prepared a potent, non-pyrogenic urokinase, free of direct proteolytic activity, from human urine by a method involving clarification, isoelectric precipitation and barium sulfate adsorption (129th National Meeting of the American Chemical Society, Dallas, Texas, April, 1956). The activation of plasminogen by urokinase was studied at 0

to $+2^{\circ}\text{C}$. in the absence of casein and at pH 7.4. The proteolytic activity resulting from streptokinase activation was used as an index of maximal plasmin activity. This material has a relative potency of 1/17 that of streptokinase. These studies demonstrated the enzymatic nature of urokinase. Urokinase is labile below pH 5.0 with an optimal stability between pH 5.0 and 10.0.

This work was done at the request of the Director of the American National Red Cross Blood Program under an agreement between the American National Red Cross and the Michigan Department of Health Laboratories.

STUDIES ON THE ACTIVATION OF HUMAN PLASMINOGEN (PROFIBRINOLYSIN)

BY NORMA ALKJAERSIG and SOL SHERRY
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Several different types of activation of human plasminogen were investigated.

Spontaneous activation. Purified human plasminogen preparations, devoid of significant amounts of antiplasmin, will spontaneously activate to completion, without significant loss of enzyme activity, in the presence of 50 per cent glycerol. The activation appears to be autocatalytic in nature. Temperature, ionic strength, metallic ions, and pH effect the activation rate. Plasmin preparations of high purity and free of activators have been obtained by this procedure.

Trypsin activation. Studies of the kinetics of trypsin activation of plasminogen confirm the catalytic nature of the activation. The activation is relatively slow and is non-competitively inhibited by benzoyl arginine methyl ester. These observations suggest that the affinity of trypsin for plasminogen is of a relatively low order.

Urokinase activation. Urokinase activates plasminogen rapidly and catalytically. Highly purified urokinase digests casein, and arginine and lysine esters. Since the synthetic substrates competitively inhibit the urokinase activation of plasminogen, the esterase activity appears to be an integral part of the activating function.

Streptokinase activation. Recent studies have indicated that the streptokinase activation of plasminogen is a two-step reaction: (1) streptokinase interacts with a plasmin factor to form an activator, and (2) the activator catalytically converts plasminogen to plasmin. The catalytic nature of this activation is apparent only when streptokinase is removed from the system prior to assay. The isolated plasmin has similar properties to spontaneously activated plasmin. The activator formed from streptokinase and the human plasma factor (probably plasminogen itself) appears to be a proteolytic enzyme with lysine and arginine esterase activity. Competitive inhibition of the strepto-

kinase activation of plasminogen by arginine and lysine esters, supports this view.

During the activations studied 25 to 30 per cent of the plasminogen nitrogen becomes TCA soluble. Furthermore in each instance the activation appears to be accomplished by an enzyme capable of digesting casein and the synthetic substrates, suggesting that the conversion from plasminogen to plasmin involves a proteolytic step.

PHYSICOCHEMICAL STUDIES ON PROFIBRINOLYSIN (PLASMINOGEN) AND FIBRINOLYSIN (PLASMIN)

BY SIDNEY SHULMAN, NORMA ALKJAERSIG, and SOL SHERRY
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A number of preparations of human plasminogen and plasmin have been studied by means of ultracentrifugal and electrophoretic analyses. The plasminogen was prepared from Fraction III by the Kline procedure and was activated either spontaneously or by streptokinase.

Examination in the ultracentrifuge showed the plasminogen to be quite homogeneous, with a sharp main peak and a small, broad, slightly faster component. A plot of sedimentation constant versus concentration (in g./dl.) for the main component in 17 runs, using three different preparations, gave a line with the equation, $s_{20,w} = 4.28S - 0.4 c$. The spontaneously-active plasmin showed a similar sedimentation pattern. A plot for seven runs, using two different preparations, gave the line, $s_{20,w} = 3.56S - 0.7 c$. Several plasmin samples showed a very slow peak with a sedimentation rate approximately 1 S. This component was never seen in plasminogen.

The diffusion constant for plasminogen was determined to be $2.96 \times 10^{-7} \text{ cm}^2 \text{ sec}^{-1}$. The intrinsic viscosity was also measured, resulting in a value of 0.070 dl./g.

Examination by electrophoresis revealed the plasminogen to consist of a pair of very poorly resolved boundaries, while the spontaneously-active plasmin seemed quite homogeneous. These observations were made in glycine buffer, ionic strength 0.10, pH 2.2. A series of runs at various pH values between 2.2 and 4.2 have been made in order to establish the plot of mobility versus pH and to locate the isoelectric point of plasmin. Difficulties are encountered in the isoelectric region because of the very low solubility of the material but a value of approximately 7 can be tentatively established by extrapolation.

The content of tyrosine, tryptophan, and carbohydrate have also been determined in both plasminogen and plasmin, and were reported and discussed.

Market Research and Medicine's Future

The Opinion Study of Prepaid Medical Care Coverage in Michigan carried out by the Michigan State Medical Society has been recognized nationally as an outstanding piece of work that contributes materially to the solution of some of the momentous problems facing medicine.

The impact of the research has already been felt, for it is highly unlikely that the MSMS House of Delegates could or would have taken the far-reaching action that it did in its September 1957 session had it not been for the well-documented report of the Study. The story of that Study will assume greater historical significance as time evaluates its effects on prepayment plans.

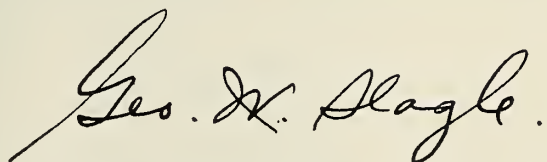
But we believe that the Study had another and perhaps equally important rôle to play in Medicine's future.

Heretofore, medical societies and medical scientists have directed their efforts toward medical scientific finding. The pursuit of the causes and cures for dread diseases has occupied their time, efforts and finances.

Then came the Study. It did not seek the answer to the cause or cure of disease; it sought answers to the ways and means of directly applying the knowledges gained from scientific medical research to the market. It was market research by a profession regarding *professional services* just as surely as business conducts market research regarding *commercial products*. The Study was the first major medical market research effort made by a state medical society.

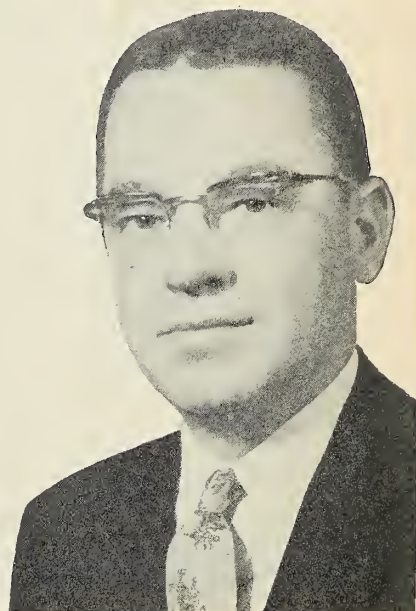
In years to come, medical market research, carried out by the doctors with the public, will occupy a place of growing importance in the sociology of Medicine. We may call it by a different name than medical market research, but it will be done because this Study has demonstrated the value and need for it.

And it's gratifying to feel that MSMS is leading the way.



President, Michigan State Medical Society

President's



Message

HIGH POINTS of the 92nd ANNUAL SESSION—MSMS

Convention-goers Tax Grand Rapids Facilities



Past Presidents of MSMS enjoying a luncheon where old times were remembered are (left to right) Louis J. Hirschman, M.D., Traverse City; Henry R. Carstens, M.D., now of Massachusetts; Arch Walls, M.D., Detroit; Burton R. Corbus, M.D., Grand Rapids; L. Fernald Foster, M.D., Detroit; Wilfrid Haughey, M.D., Battle Creek; and E. F. Sladek, M.D., Traverse City.

Dateline, Grand Rapids

These three words appeared on news copy across the nation, as the communication media reported the policy-making and scientific session of the 92nd Annual Session of the Michigan State Medical Society, September 23-28, 1957.

The MSMS Opinion Study of Prepaid Medical Care Coverage in Michigan and the resulting action of the Delegates in proposing sweeping changes in medical care coverage plans made the

biggest news of the week. Special guests from State Medical Societies (Texas, Colorado, et cetera), insurance companies and allied organizations came to witness the tense deliberations.

Due to this influx and other factors, Grand Rapids hotels were bursting at the seams.

But not all was work, for the Officer's Night Dinner Dance provided a welcome relief from the demanding House of Delegates Sessions and the activities of the first day of scientific lectures and exhibits. The evening featured the induction of MSMS President George W. Slagle, M.D., who took over the post from retiring president Arch Walls, M.D., and a message from Michigan's Governor, the Honorable G. Mennen Williams.

G. B. Saltonstall, M.D., of Charlevoix, was elected President-elect by the House of Delegates Tuesday, September 24. Doctor Saltonstall abdicated his post as Councilor to become a Society officer and was succeeded by Donald G. Pike, M.D., of Traverse City.

Registration for the 92nd Annual Session of the Michigan State Medical Society was 3,235.

Doctors of Medicine.....	1,540
Guests	422
Exhibitors	585
	2,547
Woman's Auxiliary members.....	284
Medical Assistants members.....	404
GRAND TOTAL.....	3,235

PHOTO ROUND-UP OF SESSION HIGHLIGHTS



Mrs. C. Allen Payne, new president of the Woman's Auxiliary to MSMS, from Grand Rapids (*second from left*), chats a moment about the national scene with Mrs. Paul C. Craig, AMA Auxiliary president (*seated, right*), Mrs. A. C. Stander, retiring Michigan president, and Mrs. W. G. Mackersie (*left*), Michigan delegate to the AMA Auxiliary.

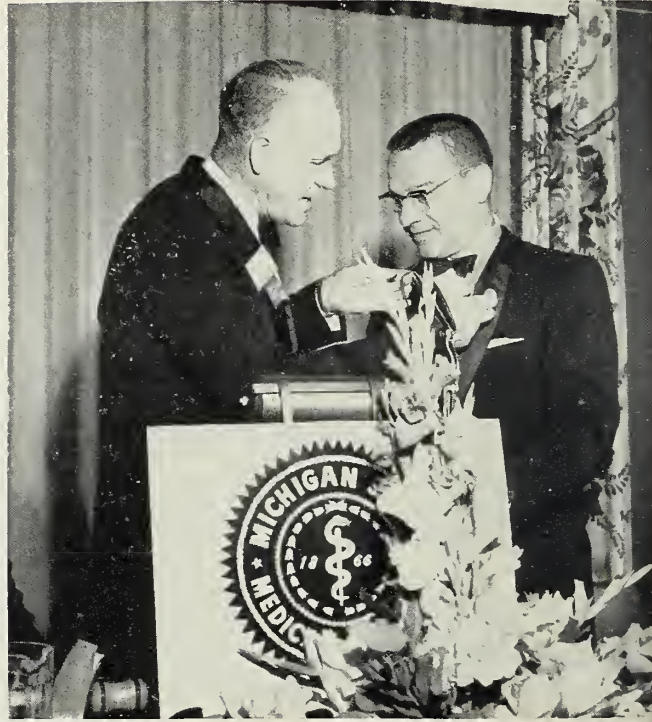
ctor of the Year, Paul Van Riper, M.D., of Cham-
in Marquette County, 82 years young, looks on
Kenneth H. Johnson, M.D., speaker of the House
Delegates (*center*), and J. J. Lightbody, M.D.,
e-speaker, review the action of the Delegates in
ning Michigan's Foremost Family Physician of
57.



New president of the Michigan State Medical As-
sistants Society, Miss Marlouise Redman, (*left*), poses
for an official portrait with retiring president, Miss
Doris Jarrad, following induction ceremonies at the
Hotel Manger Rowe in Grand Rapids.

OFFICERS NIGHT

Retiring MSMS president Arch Walls, M.D., presents the badge of office to incoming president George W. Slagle, M.D., of Battle Creek, during formal ceremonies at Wednesday evening's Officers Night Dinner Dance in the Pantlind Hotel Ballroom.



The Honorable G. Mennen Williams, Governor of Michigan, addressing the 250 guests at the Officers Night Dinner Dance, said that he would protect the personal relationship between the doctor and the patient, and would consult the medical profession on all state public health measures.

DINNER DANCE



Informality and fun were bywords at the Dinner Dance where guests dined by candlelight and enjoyed soft music before the brief formal ceremonies began.



Editorial

THE DOCTOR AS A CITIZEN

The doctor of today owes more to his community than good medical care. The community takes for granted that the doctor's skill in medical matters will be of the highest calibre and it also expects him to be a good citizen.

No executive, business or professional man should expect a free ride in the city or town where he makes his living. Either that community is a good place in which to live and work or it is disappointing and the citizen is not satisfied with his lot.

In either case, he has an obligation to do more than pay taxes and contribute generously to charity and to campaigns. The good community is inevitably one in which responsible citizens have given freely of their time and talents to community projects of all kinds. The doctor, because of his training and personal contacts with people, has the background to make especially worthwhile contributions to many community enterprises.

True, the busy doctor may find it difficult to allot much time to committee and board meetings, but this difficulty is accepted by lay members whose schedule may be less demanding. These lay members are usually understanding and co-operative. Efforts in this direction are one of the best stimulants of good public relations for medicine, whether the community is large or small. They tend to re-establish the doctor in his rightful position as a community leader and counteract the often heard criticism of self interest and plush economy.

Community service not only pays big dividends in making a better city or town in which to practice, but it also improves public attitudes toward medicine. These dividends are a welcome bonus, but the doctor as a good citizen is really repaying a debt he owes to his community.

OLIVER B. MCGILLICUDDY, M.D.

EVIDENCES OF THE DOCTOR AS A CITIZEN

For a number of years, most numbers of THE JOURNAL of the Michigan State Medical Society have been assigned to some specific activity or interest of the medical profession. Over a year ago, when the designation of activities for the

various numbers for the year 1957 were made, this November number was assigned to commemorate and to illustrate the doctor as a citizen. Oliver B. McGillicuddy, M.D., of Lansing, was appointed to help work up the program. Several of the original articles included in this number were secured as a result of his activities, and the editorial signed by him was written early in the year. Michigan Medical Service and also Michigan Hospital Service, to a lesser extent, are manifest and outstanding evidences of the doctors working as citizens. The Michigan State Medical Society, in 1939 and 1940, developed Michigan Medical Service after more than ten years of intensive study.

The foremost intention was to make possible medical care to persons of lower income and especially to take care of catastrophic illnesses. This objective was accomplished by a complete new concept of services to our patients, prepayment medicine and the establishment of the theory of budgeting for health services. Incidentally, the profession helped build the budgeting theory of our people generally. The outstanding success is demonstrated by the formation of similar plans throughout the nation, the demonstration that health services can be assured, and the fact that in the seventeen years of operation, we have paid more than a quarter of a billion dollars for services to our subscribers.

Progress of time has shown the need to review and expand the services offered. The medical profession recognized this need, called a special session of our House of Delegates on April 27, 1957, and authorized a complete review and re-evaluation. The reports are being published in this number of THE JOURNAL. This is another demonstration of the activities of the physician as a citizen. Again, the Michigan State Medical Society has seen and seized its opportunity for an outstanding public service, and it is fitting that these reports should come in the number of THE JOURNAL which a year previously had been designated to emphasize that particular phase of medicine—the doctor as a citizen.

We wish to thank Dr. McGillicuddy for his efforts in accumulating and preparing the material for this issue of THE JOURNAL.

LIBERALIZATION

When Michigan Medical Service was established, it was to care for surgery in the hospital specifically. That was extended to other services in the hospital. There were good and specific reasons for that limitation, but many of our members during the years have protested that limiting our services to hospitalized patients increased the charge and took up hospital beds which could be used for more serious cases instead of being used for minor operations. Effective October 1, 1957, Michigan Medical Service has issued a liberalization rider authorizing the payment of surgery wherever done. It is hoped this will relieve our crowded hospitals, and it is confidently expected that the Blue Cross program will benefit materially. Several years ago, a specific number of procedures—twenty-two in number—were authorized to be done in the office instead of requiring hospitalization. The experience in that time has been a very much increased utilization resulting in the request this year for an advancement of our rates. This extension to all surgery is on a trial basis and will determine the utilization and financial report.

MEDICAL EDUCATION

Several years ago, it was estimated that our medical schools needed at least \$10,000,000 each year, in addition to the funds now available through regular sources and curriculum fees, in order to continue their very worthy work. Contributions have been solicited quite generally from practicing physicians for a number of years, and these have amounted to impressive figures. However, a very small percentage of our doctors are joining in this work.

The end of another year is now approaching, and our members are urged to remember that any gifts made for medical education purposes are deductible from income tax. Several programs have been suggested; one is that each alumnus make a donation every year of a reasonable sum to his alma mater. This can be done either directly to the school or through the American Medical Education Foundation. Many of our doctors have been following through with this program. The deans of our two medical schools in Michigan reported last year the reception of generous donations which they have mostly assigned to keep certain types of research work active. One of

our Councillors suggested last year that each man on his birthday make a donation for this purpose. This birthday program has been activated in Detroit in the construction of Wayne State University's Community Art Center, and numerous foundations including "Detroit's Birthday Capital Gifts Committee" contributing.

The Michigan State Medical Society could also have a Birthday Capital Gifts Committee to aid in our medical education program. And please do not forget the Michigan Foundation for Medical and Health Education which is making funds available for Michigan medical students to continue their study. The address is: 606 Townsend Street, Lansing 15, Michigan.

THE MARKET OPINION SURVEY

The House of Delegates, at its April 27, 1957, special session, authorized a market opinion survey to be conducted and finished before the meeting of the House on September 23. Our members will remember that, following the request of Michigan Hospital Service two years ago for an increase in rates, the Governor appointed a special Study Commission to determine "the reason for constant increase, what must be done, and how better health service could be given the people at less expense." After numerous meetings, the commission suggested and engaged Dr. S. A. Axelrod of the University of Michigan School of Public Health Economics to conduct a detailed survey which would exemplify in detail that Commission's findings. Dr. Axelrod reported that the survey which must also include the medical program would take at least two years and would cost \$200,000. That survey never was made.

In authorizing the present Opinion Survey, the House of Delegates specified that a plan of action be set up which would meet the demands and ideals and previously pledged acceptance by the Michigan State Medical Society, Michigan Medical Service, Michigan State Hospital Association, Michigan Hospital Service, and the Governor's Commission.

The Opinion Study of Prepaid Medical Care Coverage in Michigan was begun in May, 1957, upon the instruction of the April 27, 1957 meeting of the House of Delegates in Detroit.

Responsibility for the Study was placed in the Executive Committee of The Council. Hugh W. Brenneman was appointed Director of Study, and

Warren F. Tryloff was named Associate Director. Special Consultant was David J. Luck, Ph.D., director of the Bureau of Business Research, Michigan State University.

The four-phase Study included results from a 1,000 personal interview-survey, a questionnaire mailed to more than 60,000 Michigan residents, a separate survey of doctor opinion, and a compilation of facts from other surveys on this subject.

Results of the cross-section opinion study involving the views of more than 12,000 persons were reported to the MSMS House of Delegates September 23. The full report totaled 274 pages and included detailed tables of statistics, summaries and highlight sections.

According to Max L. Lichter, M.D., Chairman of the House of Delegates Reference Committee on Medical Service and Prepayment Insurance, the Study was of inestimable value to the committee members in their deliberations as to the scope and future direction of prepaid medical care coverage.

REFERENCE COMMITTEE ON MEDICAL SERVICES AND PREPAYMENT INSURANCE

We salute the members of the Reference Committee on Medical Services and Prepayment Insurance for an exhausting and tremendous job well and faithfully done. They are Max L. Lichter, M.D., Chairman; Laurence S. Fallis, M.D., H. C. Hill, M.D., R. L. Novy, M.D., D. G. Pike, M.D., Sidney Scher, M.D., and W. P. Strong, M.D. Several important resolutions were referred to this committee for action, study and advice. For years, it has been the policy for the Michigan State Medical Society House of Delegates to refer all resolutions to reference committees which will meet at stated times and hear pleadings and objections, criticisms, comments, information and any material that will help the committee make a final advisory report to the House, thus avoiding much argument on the floor.

There were two main study committees. (1) The Owen Committee, appointed by the House of Delegates to study the prepayment insurance program, to interview everybody interested including medical men, hospitals, labor, industry, rural and urban people and to determine what they want in the nature of medical service, made such studies, held many meetings, and wrote a

report which was distributed to each member of the House before August 15 for primary study. (2) The Council appointed a committee to make detailed studies and specific recommendations. This committee—the Slagle Committee—after two years' study and research, conferences with administration in Blue Shield and many other interested persons who had made prepayment insurance studies, brought in a report to The Council.

The Council met on Sunday, September 22, transacted its routine business, including the final work on its supplemental report to the House of Delegates, and then considered these two reports. The first (Owen Committee Report) was transmitted automatically as it had already been sent out. The second (the Slagle Committee Report) was approved and also transmitted to the House. The Council was in session all day Sunday until nearly 1:00 a.m., Monday morning. These reports were then presented to the House, Monday forenoon.

A good part of Sunday had also been spent by The Council in studying the condensed report of the Market Opinion Survey which had just been completed. Monday noon a copy was given to each member of the House and also to all Blue Shield, State Society and insurance guests and reporters from innumerable news-gathering interests. The reference committee on medical service and prepayment insurance met at 5:00 p.m. on Monday, worked with a very short time out for dinner until the evening meeting of the House, met again that evening and worked until 1:00 a.m. They met again the next morning, Tuesday, before 8:00 a.m. and worked until the House came into session. Tuesday afternoon, after the meeting of the membership of Michigan Medical Service, they again went into session until about 6:30, recessed for half an hour, came back into session until the evening, suspending operations for about fifteen minutes during the time the House was electing new officers. They returned to the conference room where they stayed until 4:00 a.m., Wednesday morning. By 6:00 a.m. Wednesday, the committee was dictating its report to stenographers. The report was finished and ready to be presented to the House at about 10 a.m. at an unprecedented special meeting of the House of Delegates which had been called for this final report.

This reference committee had held open hearings, welcoming any and every person who wished

Statement of Principles Governing Physicians and Lawyers

In recognition of the public service obligations common to the medical and legal professions, and in the belief that such action will promote a closer cooperation and assist in maintaining a harmonious and compatible relationship between the two professions, thus serving the public interest, the Michigan State Medical Society and the State Bar of Michigan do hereby adopt a statement which covers:

1. Medical Reports Requested by Attorneys
2. Co-Operation Between Physician and Attorney in Cases Expected to Be Tried and Where Attorney Proposes to Present Physician as a Witness.
3. The Physician as a Witness on the Trial of a Case.
4. Compensation for Services of Physicians
5. Inter-professional Courtesy and Understanding

The complete Statement of Principles is published in this issue of THE JOURNAL.

Resolution

WHEREAS, there has developed a multiplicity of medical meetings in these times, most of them of excellent caliber and value; and

WHEREAS, many of these meetings are sponsored by special organizations, hospitals, and medical schools; and

WHEREAS, for many years, the Michigan State Medical Society is and has been recognized as the representative organization for the doctors of medicine of Michigan; and

WHEREAS, the Michigan State Medical Society has sponsored educational programs for its members each year in March and in September, which have offered excellent clinical material for both specialist and general practitioner; and

WHEREAS, many special organizations, hospitals, and medical schools have been holding meetings of their own during these months, to the detriment of the Michigan State Medical Society-sponsored meetings; therefore, be it

RESOLVED: That The Council of the Michigan State Medical Society believes that the months of March and September, annually, should be left open for the statewide meetings sponsored by the Michigan State Medical Society and that ancillary groups, hospitals, and medical schools be respectfully requested to refrain from scheduling statewide meetings during these months, to the end that all members of the Michigan State Medical Society may be given adequate opportunity to attend the MSMS meetings.

Adopted by the Executive Committee of The Council, Michigan State Medical Society October 16, 1957.

Action of the House of Delegates of MSMS as Adopted on Medical Insurance and Prepayment Insurance

Supplemental Report of the MSMS Council on the Report of the Committees on Michigan Medical Service

A. GENERAL CONSIDERATIONS

The Michigan State Medical Society has made an intensive study of the development and the operation of the many means currently employed both in Michigan and elsewhere to insure against or to prepay the costs of medical care. The conclusions resulting from that study are set forth below and are based upon the following fundamental considerations.

1. The people of Michigan are entitled to and should have health care which meets the highest standards attainable.
2. Means should be generally available in Michigan which will permit the financing of the costs of necessary medical services and supplies to the greatest extent possible and practicable through prepayment.
3. To whatever extent the cost of a particular medical service is not covered by prepayment, such uncovered amount shall be predictable, be known to the patient in advance, and be within his ability to budget for out of income.

The foregoing can be accomplished only if those responsible for rendering the necessary medical services, namely the physicians of Michigan, assume the further responsibility of establishing within the profession a structure around which sound insurance or prepayment plans can be built and also a system by which the profession can assure itself, the prepayment plan subscribers, and the underwriters that the structure is functioning in accordance with its commitments.

B. COMMITMENTS BY THE MICHIGAN STATE MEDICAL SOCIETY

In light of the foregoing, the Michigan State Medical Society undertakes the following commitments:

1. The Michigan State Medical Society will endorse any contracts offered by an insurance carrier or prepayment plan organization which embodies certain published principles, provided the carrier issuing the contract stipulates it will not offer any prepaid medical care contract which is preferential or discriminating in its rating. This endorsement shall remain in effect as long as the carrier continues to make such contracts available and keep the stipulation in effect.
2. It being the objective of the medical profession to make certain that voluntary health protection be available to all self-sustaining people at reasonable cost, the endorsement of the Michigan State Medical Society will be given only if rates charged by the insurance or prepayment carrier are fair and equitable and non-discriminatory.
3. The Society will use its best efforts to secure the participation of its members in all contracts endorsed by the Society.
4. A subscriber rendered care by a participating physician will receive "service benefits" as provided in his contract. The basis is set forth in Section D.

5. The Council of the Michigan State Medical Society will appoint a Medical Care Insurance Committee having the following functions:

- (a) To examine all contracts submitted for endorsement. A report will be sent to the Council which will have the authority to issue a certificate of endorsement on behalf of the Society.
- (b) To cooperate with the Permanent Advisory Committee on Fees of the House of Delegates concerning the Relative Value Scale and applicable unit values.
- (c) To develop review procedures for any matters concerning the subscriber, the physician, the insurance carrier, and others.
- (d) To develop Review Committees in each of the Councilor Districts of the Society, nominated locally which shall be ap-

pointed by The Council of the Michigan State Medical Society. These shall function under the direction of the Medical Care Insurance Committee, which will also serve as a unit to which appeal can be made from decisions of the Review Committee(s).

C. PRINCIPLES TO BE EMBODIED IN INSURANCE CONTRACTS

- 1. There must be complete freedom of choice of physicians by the patient. Nothing in any contract will imply any restriction of this principle.
- 2. All benefits will be on a service basis consistent with the principles set forth in Section D, except when a subscriber voluntarily occupies a private room in a hospital. Section D published elsewhere.

This Statement of Principles is much shortened, condensed principles only being presented here. The complete report is published elsewhere in this issue of THE JOURNAL.

to speak, either to protest or support, had heard everyone to the extent that he wished to talk, and had urged the audience to take part. At one time, they even went through the whole audience asking each individual whether he had any remarks to make. During the hours from 2:00 until 4:00 a.m., on Wednesday morning, the committee was in executive session determining their action.

So thoroughly was this committee's work done and so exhaustive was the study that the Owen report was adopted by a tremendous majority with only one suggestion changed, a study committee being recommended to survey that problem. The revised Slagle report, which was the detailed and explicit statement of program, was adopted without a single negative vote.

The Michigan State Medical Society, through its House of Delegates and by unanimous vote, has now stated its principles and programs to give prepaid medical care to the people of the State of Michigan. We again take off our hats to the members of these committees who accomplished a task as great as any ever presented to our Society and did it in a masterful method to the complete satisfaction of every member of the House, as represented by the vote.

DON'T CAMOUFLAGE HEALTH CARE

The term "medical care" is very misleading. It has caused much unfavorable publicity and needless harassment to the medical profession. The latest quarterly index of consumer prices is a sample. Month after month, "medical care" has the highest price index of all essential items and services, being 137.9, compared to the total consumer index of 120.2. These total indexes have been increasing each month. An analysis of this report shows that when hospitalization expenses and prepayment premiums are removed from the listing, the rest of the medical care is almost exactly the same as that for miscellaneous goods and services.

The August 10, 1957, issue of the *Saturday Evening Post* contained an article, "Don't Let Medical Bills Bankrupt You." In red type is the following paragraph:

"Each year millions of families are hit by unexpected, ruinous expenses of major illness. Here is one way to avoid this financial catastrophe."

There is a very understanding article based upon a survey conducted by the Health Informa-

tion Foundation which outlines a few catastrophic cases where the medical services and the hospital services were long—prolonged even up to almost ten years in one case. In several of those reports, the author listed hospital services that ran into thousands of dollars and stated that "medical services costs were not obtained"—individual items quoted were almost exclusively hospital costs rather than medical costs. It has become quite popular to refer to everything that is unusually expensive as "medical costs," when actually the majority of those expenses—or a great proportion of them at least—are hospital charges extending over long periods of time and amounting to impressive sums.

The viciousness of this propaganda is evidenced by a series of letters which appeared in the *Saturday Evening Post* for September 7, every one of which referred to this article in the August 10 issue and immediately advocated socialized medicine, with the government taking over the whole costs. All failed to appreciate the fact that there is a difference between medical costs and hospital costs. Unfortunately, everybody has used the words "medical costs" to cover all health services.

Let us adopt the term "health costs."

EDITOR'S NOTE

We call your attention to the fact that this is the biggest issue of *THE JOURNAL* that the Michigan State Medical Society has ever published, and possibly one of the most significant.

There are 168 numbered pages including a thirty-two-page, tinted section devoted to an analysis of our Market Opinion Survey. Also there is a four-page tinted insert, referring to some most important actions: (1) Statement of Principles between Physicians and Lawyers, (2) Action of the Council regarding conflicting medical meetings detracting from the MSMS Michigan Clinical Institute and Annual Session, (3) Statement of Principles made by the House of Delegates regarding Prepayment Insurance.

There is not an unlimited number of ways for Social Security to expand. Medical care is one of the few areas not covered by "social insurance," and the present framework of the Social Security Act is adequate to cover socialized medicine by means of a few amendments. The Disability Insurance "Trust" Fund could be changed into a Health Insurance "Trust" Fund by the stroke of a pen. Taxes could be increased. A new title could be added to the law and the private practice of medicine could be virtually destroyed.

Michigan's Department of Health

Albert E. Heustis, M.D., Commissioner

LABORATORY DIAGNOSTIC TESTS FOR ASIAN TYPE INFLUENZA

Health officers of Michigan have received the following directions from the Division of Laboratories of the Michigan Department of Health for submission of specimens for laboratory diagnostic tests for Asian Type Influenza.

It is recognized that laboratory studies on epidemic influenza are not of practical value in the management of individual cases since the majority of patients will have recovered before the studies have been completed. It is important, however, to take a sampling of specimens from a few cases during an outbreak, for laboratory study, in order: (a) to establish specific etiology in each outbreak, (b) preserve viral agents and sera for future study. The number of specimens submitted will depend upon the size of the outbreak and the population at risk. The minimum number will be 4 (4 patients) and the maximum number 12.

Health officers wishing to submit specimens for laboratory detection of Asian Type Influenza should first contact Dr. W. W. Ferguson, Division of Laboratories, Michigan Department of Health, Lansing, telephone number Ivanhoe 4-1491, for information regarding collection and submission of specimens. The division of laboratories, Michigan Department of Health, was prepared to examine influenza specimens on or after October 10, 1957.

- I. Types of Laboratory Tests Available.
 - A. Virus isolation and identification.
 - B. Complement fixation test for demonstration of a rise in specific antibody titer.

II. Types of Specimens to be Collected.

A. Throat Washings for Virus Isolation.

1. *When to Collect:* For optimum results the washings should be obtained during the first three days of illness and while the patient is still febrile. After the seventh day of illness throat washings are worthless.
2. *Amount:* 10-15 cc.
3. *Specimen Collection:* The patient should gargle thoroughly (2 to 3 times) with 10 to 15 cc. of distilled water. The gargling is collected into a paper cup, then transferred to a clean sterile sputum container.
4. *Specimen Container:* The Division of Laboratories, Michigan Department of Health, will supply upon request collection kits for throat washings consisting of the following items:

- 4 clean sterile sputum bottles
- 4 protective metal bottle containers
- 4 F22 specimen report forms
- 4 case history forms
- 1 cardboard carton 6" x 5" x 5"

Specimen bottles are supplied 4 to a box for convenience in packing for return to the laboratory.

5. *Delivery of Specimens to Laboratory:* Throat washings may be held 2-3 hours after collection at refrigerator temperatures before final packaging for delivery. After that time they are of questionable value unless packed in dry-ice. Pack the metal bottle containers, 4 to a box, in the cardboard carton, surround containers with dry-ice, then seal the carton with tape. *Please screw top on fecal containers firmly to prevent access of CO₂. Call your nearest State Police Post and request State Police Relay Service for prompt delivery service to the Laboratories, Michigan Department of Health, Lansing.*

B. Blood for Serologic Tests.

1. *When to Collect:* The first blood specimen should be taken *not later* than the fifth day of illness, the second specimen *not before* ten days after onset. Paired specimens are required; single specimens are useless and will not be examined. This is not meant to imply that both specimens need to be sent in at the same time; the opposite is true. Send each specimen from an individual to the laboratory promptly. If for any reason a second specimen cannot be obtained, the Laboratory will appreciate being informed.
2. *Amount:* 10 cc. of clotted blood at each bleeding. Distribute into two shell vials.
3. *Specimen Container:* Upon request the Division of Laboratories, Michigan Department of Health, will supply sterile shell vials (the type provided for collection of blood for serologic tests for syphilis) and mailing containers. For a single patient the following items will be provided:
 - 4 shell vials
 - 2 sets of double mailing containers
 - 2 F22 specimen report forms
 - 2 F4C Michigan Department of Health mailing labels stamped "Influenza Study"
 - 2 case history forms
4. *Delivery of Specimens to Laboratory:* Send by mail.

- III. *History:* A history must be provided for each patient from whom specimens are collected and this history should accompany specimens forwarded to the Laboratory. Specimens will not be examined unless they are accompanied by completed history forms.

unique
derivative of
Rauwolfia
canescens

Harmonyl*

combines the full effectiveness of the rauwolfias
with a new degree of freedom from side effects

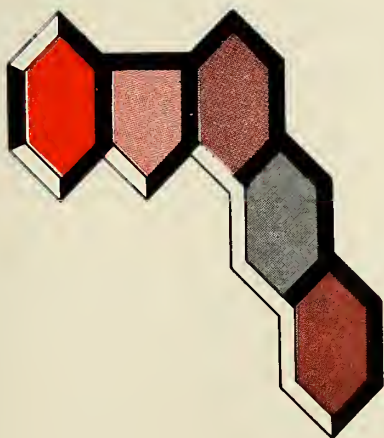
Harmonyl makes rauwolfia more useful in your everyday practice. Two years of clinical evaluation have shown this new alkaloid exhibits significantly fewer and milder side effects than reserpine. Yet, Harmonyl compares to the most potent forms of rauwolfia in effectiveness.

Most significant: Harmonyl causes less mental and physical depression—and far less of the lethargy seen with many rauwolfia preparations.

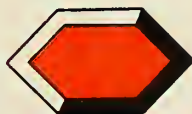
Patients became more lucid and alert, for example, in a study¹ of chronically ill, agitated senile cases treated with Harmonyl. And these patients were completely free from side effects—although a group on reserpine developed such symptoms as anorexia, headache, bizarre dreams, shakes, nausea.

Harmonyl has also demonstrated its potency and relative freedom from side effects in hypertension. In a study comparing various forms of rauwolfia², the investigators reported deserpidine “an affective agent in reducing the blood pressure of the hypertensive patient both in the mild to moderate, as well as the severe form of hypertension.” They also noted that side reactions were “less annoying and somewhat less frequent” with this new alkaloid. Other studies confirm that few cases of giddiness, vertigo or sense of detached existence or disturbed sleep are seen with Harmonyl.

Professional literature on this unique rauwolfia derivative is available upon request. Harmonyl is supplied in 0.1-mg., 0.25-mg. and 1-mg. tablets. **Abbott**



References: 1. Communication to Abbott Laboratories, 1956. 2. Moyer, J. H. et al: Deserpidine for the Treatment of Hypertension. *Southern Medical J.*, 50:499, April, 1957.



* Trademark for Deserpidine, Abbott

In Memoriam

WILLIAM DeKLEINE, M.D., seventy-nine, former State Health Commissioner from 1944 to 1947, died September 20, 1957, at his home in Cheektowage, New York. Dr. DeKleine was a native of Ottawa County, Michigan. A 1906 graduate of the University of Michigan Medical School, he was a pioneer in the field of public work. Dr. DeKleine was the first public health officer in Flint and from there, in 1920, he went to a similar office in Saginaw. He later organized public health offices in other cities including Mansfield, Ohio; Salem, Oregon, and Fargo, North Dakota.

JOHN W. EDWARDS, M.D., fifty-seven, Detroit physician, died August 24, 1957, at Burton Mercy Hospital following a stroke. Born on February 12, 1900, Dr. Edwards received his early education in his birthplace, Pickens, Mississippi. He later graduated from Alcorn College, Howard University, and the Howard University School of Medicine. Upon completion of his medical training, Dr. Edwards served his internship at Provident Hospital in Baltimore, Maryland. He came to Detroit in 1929 and established his first office on Warren Avenue. A year later, realizing the need for doctors in the rapidly-growing Eight Mile Road community, Dr. Edwards moved his office to that area where he remained until his retirement two years ago.

WILLIAM L. FOSTER, M.D., sixty-five, Detroit general practitioner, died September 13, 1957. A native of St. Johns, Michigan, he was graduated from the College of Medicine at Northwestern University in 1926 and was a staff member at Grace, Brent and Mt. Carmel Mercy Hospitals. Dr. Foster was a member of Lansing Lodge No. 33, F&AM and the Bushnell Congregational Church.

LEO J. GOULET, M.D., sixty-four, Ludington physician, died September 9, 1957. Dr. Goulet was born in Toledo, Ohio. His family moved to Bay City where he graduated from Bay City High School. Receiving his Bachelor of Science degree in 1918 from University of Michigan and his medical degree in 1920 from the University of Michigan School of Medicine, he moved to Ludington in 1922 after completing his internship at Foote Memorial Hospital in Jackson. Dr. Goulet was a member of the American College of Surgeons, Ludington Elks and Eagles lodges, Ludington Chapter, Society for the Preservation & Encouragement of Barber Shop Singing in America, and had been a local surgeon for many years with the Chesapeake & Ohio Railroad Company. Dr. Goulet served as physician for high school athletic teams and was an avid hunter, fisherman and boating enthusiast.

CLYDE A. LEONARD, M.D., seventy-five, Jackson County physician, died September 4, 1957. Dr. Leonard attended grade school at Athens, Michigan, graduated

from the University of Michigan Medical School in 1904 and was a past president of the Jackson Medical Society. He served on the staffs of Foote and Mercy Hospitals.

WESLEY H. MAST, M.D., sixty-five, Tecumseh physician, died September 3, 1957. Dr. Mast received his doctor's degree from the University of Michigan in 1924 and interned at Highland Park Hospital before beginning his medical practice in Petoskey in 1925. In 1947, he retired and moved to Tecumseh. He was a member of the Masonic Lodge in Tecumseh and an elder in the Presbyterian Church of Tecumseh. Dr. Mast was a past president of the Northern Michigan Medical Society, past president of the Kiwanis Club, member of the V.F.W. Post 2051 and a veteran of World War I; he served in France.

FERRIS N. SMITH, M.D., seventy-two, Grand Rapids, nationally known plastic surgeon, died September 18, 1957. A 1910 graduate of the University of Michigan Medical School, Dr. Smith began his practice in Grand Rapids in 1913 and during World War I served with the Royal Medical Corps of England as one of two plastic surgeons at Queens Hospital, London. He later taught at the International Clinic in Paris and demonstrated at the Royal College of Surgeons in England. His textbook on plastic surgery was used in all army hospitals at the start of World War II. He had been on the staff of Blodgett Memorial hospital in Grand Rapids since 1923, where he served as Chief of Staff in 1929 and 1930.

HENRY C. WELLARD, M.D., fifty-six, New Baltimore physician, died unexpectedly of a heart attack August 30, 1957. Dr. Wellard was born November 14, 1901 in Ash, Kent County, England, coming to this country and area at the age of five. A Wayne University graduate in the school of medicine, Dr. Wellard joined the Michigan National Guard in 1930 and returned after five and one-half years of service in World War II. a Lt. Colonel. He was a past president of the Macomb County Medical Society, Secretary of the Medical Staff of St. Joseph Hospital, a member of Mt. Clemens Lodge No. 6, F & AM; M Clemens Chapter No. 69 R.A.M.; Association of Military Surgeons of the United States; Port Huron Elks, and Lempke-Blackwell V.F.W. Post 7573.

WILLIAM C. WYLIE, M.D., eighty-nine, Dext physician, passed away September 11, 1957. Dr. Wyl graduated from Michigan College of Medicine at Surgery in Detroit. Besides serving his community faithfully as a physician, he served many years as health officer, many years on the board of education, and held the office of president of the board of directors of the Dexter Savings Bank for twenty years preceding his death.



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NEWS MEDICAL

MICHIGAN AUTHORS

John W. Smillie, M.D., Dale F. Roth, M.D., Fred Blum, M.D., and Keith L. Gates, M.D., Ann Arbor, are the authors of an article entitled "Glaucoma Detection in a General Hospital: A Survey of 1,054 Nearly Consecutive Admissions of Patients Over the Age of Forty Years," published in the *American Journal of Ophthalmology*, July, 1957.

James Barron, M.D., F.A.C.S., Detroit, is the author of an article entitled "Tube Feeding with Natural Foods," read at a meeting of the Great Lakes Regional Division and the Indiana State Chapter, United States Section, International College of Surgeons, French Lick, Indiana, April 7-10, 1957, and published in the *Journal of the International College of Surgeons*, September, 1957.

J. Chandler Smith, M.D., Saginaw, is the author of an article entitled "Treatment of Carcinoma of the Uterine Cervix," published in *Journal of the International College of Surgeons*, September, 1957.

William A. Lange, M.D., F.A.C.S., F.I.C.S., Detroit, is the author of an article entitled "The Hemangioma Problem," read at the Twenty-First Annual Congress of the United States and Canadian Sections, International College of Surgeons, Chicago, September, 1956, and published in the *Journal of the International College of Surgeons*, July, 1957.

Ellis A. Fuller Jr., M.D., and Will W. Ward, Jr., M.D., Ann Arbor, are the authors of an article entitled "Thrombotic Thrombocytopenic Purpura," published in the *Journal of the Kentucky State Medical Association*, May, 1957, and digested in the *Digest of Ophthalmology and Otolaryngology*, April, 1957.

John H. Ganschow, M.D., Detroit, is the author of an article entitled "Eye Conservation Program in Industry," published in *Industrial Medicine and Surgery*, September, 1957.

R. T. Blackhurst, M.D., Midland, is the author of an article entitled "A Plea for Preschool Eye Care," published in *THE JOURNAL* of the Michigan State Medical Society in March, 1957, and reprinted in *Guildcraft*, September, 1957.

Saul Sugar, M.D., Detroit, is the author of an article entitled "Diagnosis of the Commoner Glaucomas," read at the Twenty-First Annual Congress of the United States and Canadian Sections, International College of Surgeons, Chicago, September 9-13, 1956, and published in the *Journal of the International College of Surgeons*, August, 1957.

W. S. Reveno, M.D., Detroit, is the author of a group of abstracted papers presented as part of the

1957 Program of the American Goiter Association, published in *Harper Hospital Bulletin*, July-August, 1957.

Paul E. Ruble, M.D., Solomon G. Meyers, M.D., and L. Byron Ashley, M.D., Detroit, are the authors of an article entitled "Regional Enteritis," published in the *Harper Hospital Bulletin*, July-August, 1957.

Paul J. Connolly, M.D., and William S. Carpenter, M.D., Detroit, are the authors of an article entitled "Hypertension Due to Adrenal Tumor (Pheochromocytoma)," published in the *Harper Hospital Bulletin*, July-August, 1957.

Warren H. Pearse, M.D., Ann Arbor, is the author of an article entitled "Rubella in Pregnancy," published in *THE JOURNAL* of the Michigan State Medical Society and condensed in *Current Medical Digest*, August, 1957.

Vance Fentress, M.D., and David J. Sandweiss, M.D., Detroit, are the authors of an article entitled "Segal's Tubeless Gastric Analysis with Azure A Resin Compound," published in the *Journal of the American Medical Association*, September 7, 1957.

Roderick P. MacDonald, Ph.D., John R. Simpson, M.D., and Egon Nossal, B.S., Detroit, are the authors of an article entitled "Serum Lactic Dehydrogenase—A Diagnostic Aid in Myocardial Infarction," published in the *Journal of the American Medical Association*, September, 1957.

N. A. Goldsmith, M.D., and R. T. Woodburne, Ph.D., Ann Arbor, are the authors of an article entitled "The Surgical Anatomy Pertaining to Liver Resection," published in *Surgery, Gynecology and Obstetrics*, September, 1957.

Harry C. Saltzstein, M.D., and Henry Vandenberg, M.D., Detroit, are the authors of "Abstracts—1957 Meeting of the Society of Head and Neck Surgeons, Boston, and of the James Ewing Society in New York," published in the *Harper Hospital Bulletin*, July-August, 1957.

David S. Johnson, M.D., and Ralph H. Pino, M.D., Detroit, are the authors of an article entitled "Keyhole and Peripheral Iridectomies in Different Eyes in the Same Patient," published in *AMA Archives of Ophthalmology*, September, 1957.

Irving M. Blatt, M.D., and James H. Maxwell, M.D., Ann Arbor, are the authors of an article, "Secretory Sialography," a Symposium: Disorders of the Salivary Glands, presented at the Sixty-First Annual Session of the American Academy of Ophthalmology and Otolaryngology, October 14-19, Chicago, and published in *Transactions of the American Academy of Ophthalmology and Otolaryngology*, July-August, 1957.

(Continued on Page 1476)

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1. Pollock, B. E., and Pruitt, F. W.: *Am. J. M. Sc.*, 226:172, 1953.

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(Continued from Page 1474)

The American Medical Writers' Association, at its 1957 annual meeting in St. Louis, September 27, 1957, granted honor awards for distinguished service in medical journalism to four publications, (1) *Post Graduate Medicine*, the official journal of the Interstate Post Graduate Medical Assembly, (2) *The American Journal of Clinical Nutrition*, (3) journal of the Cape Girardeau County Medical Society in Missouri, and (4) *Scope Weekly*, published by the Upjohn Company of Kalamazoo. At this same meeting, the American Medical Writers Fellowship Awards were given to sixteen persons including Jacques P. Gray, B.A., M.D., M.P.H., Detroit, and Benjamin Baxter Wells, B.S., M.D., Ph.D., Detroit.

* * *

Oscar A. Brines, M.D., Chairman of the Department of Pathology, College of Medicine, Wayne State University, has become the first American to be elected President of the International Society of Clinical Pathology at the recent meeting of the Society in Brussels, Belgium. The International Society of Clinical Pathology is held once every three years. Twenty-three countries were represented at the conference.

* * *

Robert Horton, M.D., Professor of Epidemiology of the University of Michigan School of Public Health, is director of the school's "Tecumseh project." \$30,000.00 of the \$318,000.00 legislative grant of 1957 and 1958 for research in human resources has been made available. Obtaining the large amount of information desired in this study will cost considerably more than the amount made available through this grant; however, other sources are helping.

Tecumseh, a city of 6,500, was designated as the community for the health study and has received the approval of almost all the residents. The procedure will be to obtain information in such areas as diabetes, cardio-vascular disease and nutrition and possibly other conditions. There will also be a complete study of the animal population which is being made by veterinarians with emphasis on locating diseases carried by animals which might be transferred to man. Very much information has already been accumulated during the year through health, agricultural, social and economic agencies, enough to form a very good picture of general characteristics of the population and its environment. Other community health surveys have been made but this one is expected to be more extensive and more all encompassing. It is hoped to find and establish patterns of disease among the population and their relationship to type of employment, size of family, and other factors; also how and why these patterns are formed. It may take several years to complete the details.

* * *

Branch County Bulletin.—The first issue of the new *Bulletin of the Branch County Medical Society* has been received from J. C. Heffelfinger, M.D., Secretary-Treasurer. It is a sixteen-page effort containing adver-

(Continued on Page 1478)

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(Continued from Page 1476)

tising, of course, and a notice of the next meeting. It contains very interesting secretary jottings, an anonymous editorial, and notifies practically every member that he will be expected to contribute to the *Bulletin*, with some suggestions. One page is devoted to disease statistics. We shall watch with interest.

* * *

New Medical Journal.—The American Rheumatism Association has announced the publication of a new medical Journal, *Arthritis and Rheumatism*, the official journal of the American Rheumatism Association. Grune and Stratton, Inc., of New York, will add this to several other journals which they are publishing. The new journal will appear bimonthly starting with the January-February issue in 1958.

* * *

The Third Postgraduate Seminar in Physical Medicine and Rehabilitation, which is sponsored by the Bay County Medical Society, Mercy Hospital and General Hospital with their Committee on Physical Medicine, and Detroit Memorial Hospital and Sinai Hospital in Detroit, Michigan, was held in Bay City on October 9, 1957. There was an afternoon and evening session with visits to the Departments of Physical Medicine and Rehabilitation of Mercy Hospital and General Hospital following the afternoon session.

* * *

The Wayne State University Board of Governors, at its monthly meeting in September, approved gifts totalling \$1,291,300. The largest single gift was \$500,000 from the National Institute of Health, an agency of the United States Public Health Service which must be matched with funds from the University and will be used for construction of a Basic-Science Research Center. Facilities for research in the basic health aid sciences will be expanded and the training program for predoctoral and postdoctoral students in the health and medical fields will be enlarged. Another grant of \$225,994 went to the Medical Research and Training Program; included in this was a grant from the Michigan Heart Association of \$44,677 to be used in continuing eight research programs. The Rands Family Foundation gave \$10,000 to continue research fellowships in the field of geriatrics. The estate of the late Richard Cohn, a prominent Detroit advertising and publishing executive, gave a grant of \$425,000 to be used toward the construction of a new College of Nursing and Graduate School Building which will bear Mr. Cohn's name. The new College of Nursing Building will make possible an increased enrollment in the nursing curriculum which is now limited to about 600 students.

* * *

Lewis Cohen, M.D., Detroit, was awarded first prize for his exhibit "Electrovasography-Quantitative Diagnosis for Vascular Disorders," presented at the American Congress of Physical Medicine and Rehabilitation, Los Angeles, California, September 9-13, 1957.

(Continued on Page 1480)

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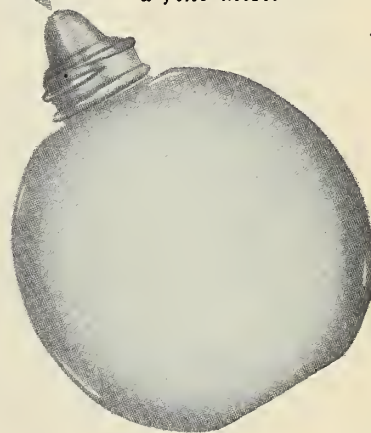
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(Continued from Page 1478)

H.R. 9467.—On August 27, 1957, Congressman Forand introduced Bill H.R. 9467 as an amendment to the Social Security Act and the Internal Revenue Code: "To increase the benefits payable under Federal Old Age Survivors and Disability Insurance Program; to provide insurance against the costs of hospital, nursing home and surgical service for persons eligible for Old Age and Survivors Insurance benefits." This is a much more extensive amendment than those of Senator Murray or those of Congressman Dingell, and it has met the opposition of the American Medical Association which has appointed a new committee. The new AMA Task Group Chairman is G. M. Fister, M.D., of Ogden, Utah, a trustee of the AMA. The other members are Francis C. Coleman, M.D., Des Moines; Robert L. Novy, M.D., Detroit; J. Duffy Hancock, M.D., Louisville; and George F. Gsell, M.D., Wichita. The objective of this committee is to spearhead a major drive against this piece of legislation which is a mammoth step in the direction of socialized medicine. This may trigger the AMA into resurveying its position on two other topics which are before the same House Ways and Means Committee. These are Social Security coverage of M.D.'s, who are the only occupational group outside the fold and a proposed pension plan of tax benefits for doctors and other professional persons, the Jenkins-Keogh Bill H.R. 9 and 10.

* * *

The American Board of Obstetrics and Gynecology will hold its Part I Examinations in various parts of the United States and Canada, on Thursday, January 2, 1958, at 2:00 p.m.

Candidates notified of their eligibility to participate in Part I must submit their case abstracts within thirty days of notification of eligibility. No candidate may take the Written Examination unless the case abstracts have been received in the office of the Secretary.

Current Bulletins outlining present requirements may be obtained by writing to the office of the Secretary: Robert L. Faulkner, M.D., American Board of Obstetrics and Gynecology, 2105 Adelbert Road, Cleveland 6, Ohio.

* * *

Michigan Medical Service Audit Cards.—Beginning July 1, 1957, Michigan Medical Service has been sending out audit cards to each subscriber who has benefited by medical service which was paid for by the Blue Shield. In July, 52,510 cards were mailed out and 14,698 were returned. Of these, 14,036 reported everything satisfactory. Of the 662 not satisfactory replies, sixty-four referred to Blue Cross. The most frequent item was surgical benefits not adequate (162). Eighty-four reported that the doctor charged in addition to Blue Shield benefits, thirty-seven reported the x-ray benefit in the basic contract was not adequate, thirty-four asked for more maternity benefits, and thirty complained that the doctor's charges were too high. There were 25 miscellaneous complaints out of well over 14,000 replies and it is assumed that any of the 52,510 having

(Continued on Page 1482)

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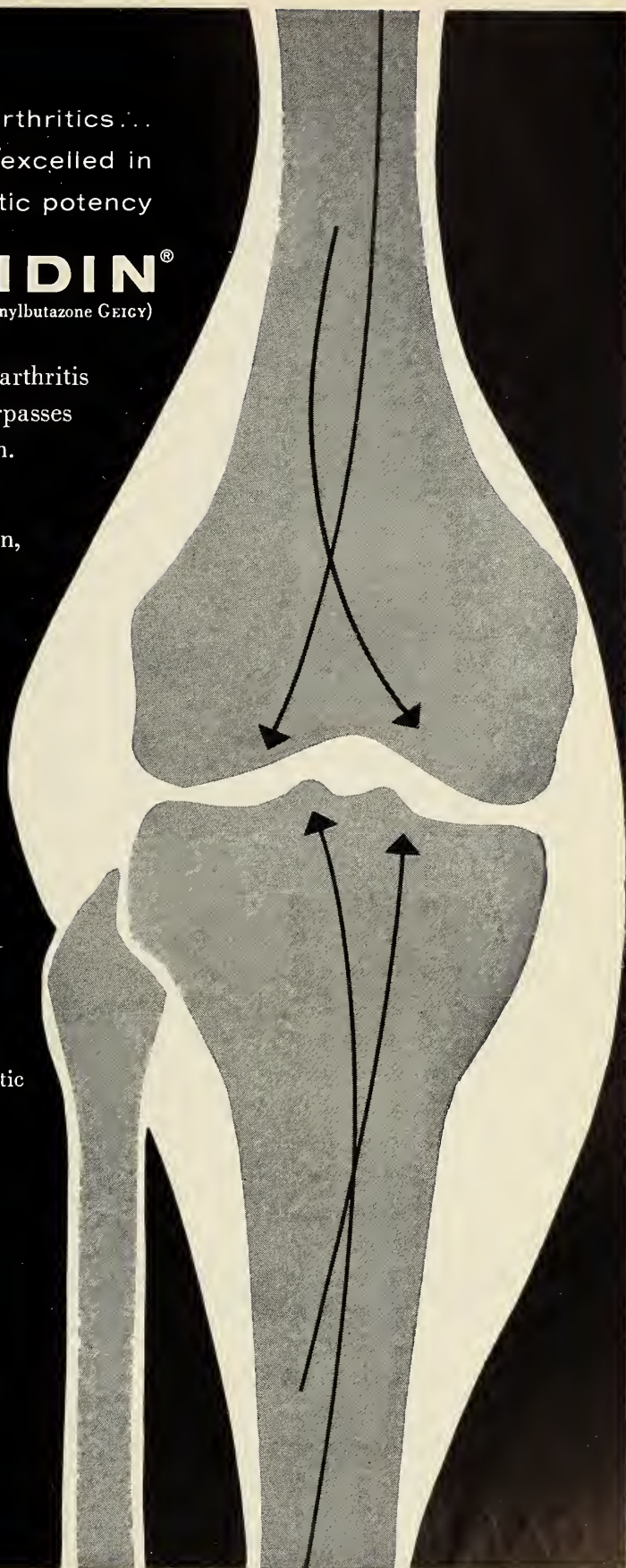
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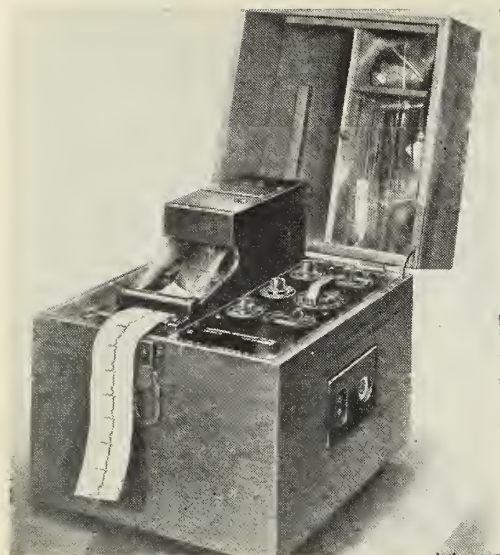
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(Continued from Page 1430)

criticisms would have replied. In general, that makes a very satisfactory report. This study will be continued.

* * *

Wayne State University, because of a recent increase in Blue Cross-Blue Shield medical insurance rates, will pay nearly \$4,000 more each year for the 1,360 faculty and staff members holding hospital and medical policies.

The University's Board of Governors Sept. 18 approved a hike in the annual subsidy on the policies from \$23.04 to \$25.08 for each policy holder, effective October 1.

Cost to the University for the rest of this fiscal year will be about \$2,400. The increase in premiums will be absorbed by the University and won't affect the rates paid by individual policy holders.

The State Insurance Commission recently approved the increase in rates on a basis of higher costs for hospital and medical services.

The American Society of Anesthesiologists held its annual convention in Los Angeles, California, October 14-18, 1957. Two Michigan groups were on the program. A paper entitled "An Evaluation of The Cardiovascular-Respiratory and General Pharmacologic Properties of 21 Hydroxy, 3-20 Dione-Sodium Succinate (Hydroxydione) in Humans" was presented by F. A. Montmorency, M.D., A. Chen, M.D., H. Rudel, M.D., W. W. Glas, M.D., and L. E. Lee, Jr., M.D., from the Departments of Surgery and Anesthesiology, Wayne County General Hospital, Eloise, Michigan. The other paper, "Lumbar Sympathetic Nerve Block for Obstetrical Analgesia, Preliminary Report of Over 1,200 Cases," was presented by Mary Lou Byrd, M.D., Edward Y. Postma, M.D., and Glenn M. Van Dommelen, M.D., from the Department of Anesthesiology, Butterworth Hospital, Grand Rapids, Michigan.

* * *

Attending the House of Delegates meeting of the Michigan State Medical Society in Grand Rapids, September 23, 24, 25, were twenty-seven guests representing Blue Shield, Mutual of Omaha, Lincoln National Health Insurance Association of America, and many others. Besides Detroit, they came from Chicago, Benton Harbor, Fort Wayne, Indiana, Des Moines, Iowa, New York City, Birmingham, Michigan, Ann Arbor, Grand Rapids, St. Louis, Missouri.

State Medical Societies and the AMA were represented: The AMA from Chicago and from Washington, D. C.; the California Medical Association, Indiana State Medical Association, Iowa State Medical Association (two); Kentucky State Medical Association; Minnesota State Medical Association (three); Missouri State Medical Association, Medical Society of the State of North Carolina, Ohio State Medical Association, Ontario Medical Association (two); Texas Medical Association (two), and the State Medical Society of Wisconsin.

Representatives were present from eight press groups, including newspapers. Also present were representatives

(Continued on Page 1484)

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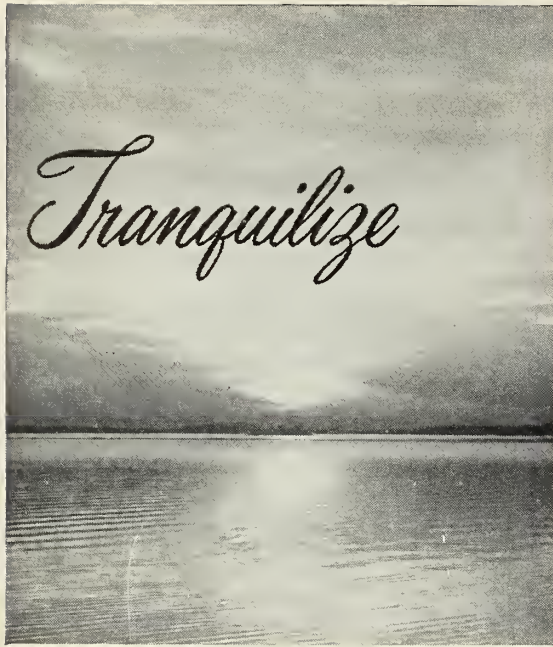
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(Continued from Page 1482)

from Michigan Hospital Association, Michigan State Pharmaceutical Association, Greater Detroit Hospital Area Council, Student Medical Association in Ann Arbor, Michigan State Nurses Association, Wayne State University College of Medicine, as well as the MSM legal counsel and the Executive Secretary of Wayne County Medical Society.

* * *

Known active and inactive cases of tuberculosis are on the increase in Michigan. Last June 30, there were 7,474 active tuberculosis cases, according to the central tuberculosis register of the Michigan Department of Health. This was an increase of nearly 3 per cent over the 1955 figure of 7,272. Inactive cases under health department supervision are increasing at an even faster pace. In 1955, there were 12,909 inactive cases. By last June 30, the figure had climbed to 15,909. This is an increase of 23 per cent. Because tuberculosis is a relapsing and a communicable disease, both active and inactive cases need medical and public health attention.

MICHIGAN TUBERCULOSIS ASSOCIATION

* * *

The Department of Continuing Medical Education at Wayne State University College of Medicine, held a Symposium on Current Progress in Allergy on October 16, 1957. Credit hours for postgraduate medical education were given to members of the Academy of General Practice who attended. The Lecturers were A. Bollet, M.D., John H. Burger, M.D., Meryl M. Fenton, M.D., Alex Friedlaender, M.D., Julius J. Greenberger, M.D., Benjamin Gutow, M.D., Homer Howes, M.D., Benjamin M. Lewis, M.D., Jack Rom, M.D., and Milton J. Steinhardt, M.D.

* * *

Max Karl Newman, M.D., Detroit, on September 19, 1957, addressed the International Society of Ultrasound in Medicine in Los Angeles, California. The title of his talk was "Observations on the Use of Ultrasound, Ultrasound Combined with Hydrocortisone by Needle Injection, and Ultrasound Combined with Hydropin Injection, in 225 Cases of Restricted Scapulohumeral Shoulder Syndrome."

He also addressed the American Association of Electromyography and Electrodiagnosis in Los Angeles, September 8, 1957, on the subject, "Electromyographic Observations in Extra-ocular Muscles Conditions."

Another paper was delivered to the General Practice and Pediatrics Group at Queen's Hospital, Honolulu, Hawaii, entitled "The Newer Developments in Physical Medicine and Rehabilitation."

An address, "Ultrasound in Metabolic Steroid Bone and Joint Disease" was delivered on September 19, 1957.

(Continued on Page 1486)

Feeding Newborns

Successful infant feeding depends on effective planning of the newborn's nutritional regimen. The first feeding, 12 hours after birth, may consist of a prelacteal solution of KARO® Syrup. This should be offered in one or two ounce amounts at two hour intervals for 24 to 48 hours to fulfill the high water requirement during the first week of life. Breast feeding may be initiated on the second day for five minute intervals to obtain colostrum and stimulate breast secretion. However, the prelacteal feeding is continued thereafter and between nursings.

Artificial feeding is offered on the second day if breast feeding is denied. Small infants are fed at three hour intervals and large infants at four hour intervals. The initial formula usually is a low caloric milk mixture to enable gradual adaptation of the feeding to the infant's tolerance. Concentration of the formula is grad-

ually increased at intervals of several days, in the absence of digestive disturbances. The infant should be fed in a semi-reclining position, burped during and after feeding, and kept on his right side or abdomen undisturbed for an hour.

The same problems of infant feeding recur from generation to generation, but solutions may differ with each era. The carbohydrate requirement for all infants is as completely fulfilled by KARO Syrup today as a generation ago. Whatever the type of milk adapted to the individual infant, KARO Syrup may be added confidently because it is a balanced mixture of low molecular weight sugars, readily miscible, well tolerated, palliative, hypoallergenic, resistant to fermentation in the intestine, easily digestible, readily absorbed and non-laxative. It is readily available in all food stores.

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FORMULA I11 cal./oz. Dried milk4 tbsp. Water20 oz. Karo1/2 oz. 3 1/2 oz. x 6 q 4h.	FORMULA II14.5 cal./oz. Dried milk5 tbsp. Water20 oz. Karo3/4 oz. 3 1/2 oz. x 6 q 4h.
FORMULA III16 cal./oz. Whole milk10 oz. Water19 oz. Karo1 oz. 3 1/2 oz. x 6 q 4h.	
FORMULA III20 cal./oz. Evap. milk 6 oz. Water12 oz. Karo1 oz. 3 oz. x 6 q 4h.	
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*Whole lactic acid milk formulas may also be prepared from whole cow's milk.

**Whole lactic acid milk formulas may also be prepared from evaporated cow's milk.

Adapted from Nelson's Pediatrics,
Saunders, Phila. 1954

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(Continued from Page 1484)

1957, to the Orthopaedic and Physical Therapists at the Rehabilitation Center of Hawaii, Honolulu, Hawaii.

On September 18, 1957, Dr. Newman presented a paper on "Electromyographic Observations of Muscular Atrophy" before the Neuro-Psychiatric Group, Alexander Young Building, Honolulu, Hawaii.

Dr. Newman was elected to the Board of Governors of the American Academy of Physical Medicine and Rehabilitation at the recent meeting in Los Angeles on September 9, 1957.

* * *

The American Trudeau Society announces a limited number of fellowships to promote the training of clinicians, medical teachers and scientific investigators in the field of tuberculosis and respiratory diseases. Awards are open to citizens of the United States for work within this country. Applications must be received by January 1. Write the Director of Medical Education, ATS, The Henry Phipps Institute, 7th and Lombard Streets, Philadelphia 47, Pennsylvania.

* * *

The American Foundation for Allergic Diseases announces post-doctoral fellowships in Research and Clinical Allergy (for two years each) with stipend of \$4,500 for the first year and \$4,750 for the second year with laboratory and travel expenses for the two-year period, \$750. For application and additional information, write Colin M. MacLeod, M.D., 820 Maloney Clinic, 36th and Spruce Streets, Philadelphia 4, Pennsylvania. Applications must be filed no later than December 15.

* * *

The American Goiter Association offers the Van Meter Prize Award of \$300.00 for the best essays submitted concerning original work on problems related to the thyroid gland. Copies must be submitted no later than February 1, 1958. For complete information, write John C. McClintock, M.D., 149½ Washington Avenue, Albany 10, N. Y.

* * *

The American College of Chest Physicians offers three awards to winners of 1958 Prize Essay Contest—\$500.00, \$300.00, \$200.00. The contest is open to *undergraduate* medical students—essays to be written on any phase of the diagnosis and treatment of chest diseases (heart and/or lungs) and closes April 15, 1958. For application and further information, write ACCP, 112 East Chestnut Street, Chicago 11, Illinois.

* * *

A unique Cancer Retreat was held in northern Michigan the weekend of September 20, under the auspices of the University of Michigan. Held annually for the past four years, this autumn's retreat was highlighted by papers delivered by Van R. Potter, M.D., Madison, Wisc.; Harold F. Dorne, M.D., Bethesda, Md.; Alfred Gellhorn, M.D., Bethesda, Md.; Lauren V. Ackerman, M.D., St. Louis; and a number of Michigan participants. The Cancer Retreat, for UM faculty members and special guests, included transportation to and from Ann Arbor.

(Continued on Page 1488)

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500

400

300

100

75

50

25

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6.0

6.5

7.0

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1. Hughes, J., et al.: *South. M. J.* 47:1082, 1954.
2. Kerley, L., and Headlee, C. P.: *J. Am. Pharm. A. (Scient. Ed.)* 48:82, 1956

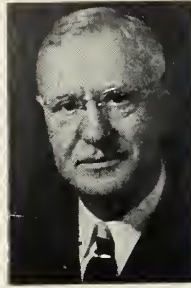
(Continued from Page 1486)

"Clinical conversation pieces" are being recorded on a series of long-play discs and being offered as a post-graduate course in pediatric allergy by Borden Company of New York. The LP discs are titled "Hydration in Relation to Infant Nutrition," "Cows' Milk Allergy in Infants," and "The Allergic History." Some 10,000 copies of these recordings are being distributed to pediatricians and general practitioners. For further information, write Borden's at 350 Madison Avenue, New York 17.

* * *

Michigan Clinical Institute Past Chairmen.—The following have served as Chairmen of past Michigan Clinical Institutes:

- 1947—Grover C. Penberthy, M.D., Detroit
- 1948—H. H. Cummings, M.D., Ann Arbor
- 1949—Wm. A. Hyland, M.D., Grand Rapids
- 1950—P. L. Ledwidge, M.D., Detroit
- 1951—Burton R. Corbus, M.D., Grand Rapids
- 1952—Edward F. Sladek, M.D., Traverse City
- 1953—J. Milton Robb, M.D., Detroit
- 1954—Wilfrid Haughey, M.D., Battle Creek
- 1955—Louis J Hirschman, M.D., Traverse City
- 1956—L. W. Hull, M.D., Detroit
- 1957—Otto O. Beck, M.D., Birmingham



Louis J. Hirschman, M.D., Traverse City, was elected Chairman of the Committee of Past Presidents at the meeting in Grand Rapids, September 26, coincident with the 92nd MSMS Annual Session. Among the Past Presidents at the meeting was Henry R. Carstens, M.D., formerly of Detroit, and now living in Springfield, Massachusetts (83 Longhill Street).

* * *

The Fourth Bahamas Medical Conference will be held at Fort Montagu Beach Hotel, Nassau, December 1-5. For reservations, program, and complete information including rates, write B. L. Frank, M.D., 1290 Pine Avenue West, Montreal, Canada.

* * *

The MSMS Headquarters Building.—Two members of the MSMS House of Delegates, wishing to speed the building of the new MSMS headquarters planned for Lansing, added personal contributions over and above the amount indicated as earmarked dues by the 1957 House of Delegates.

These contributors were: M. A. Darling, M.D., Detroit, and L. J. Bailey, M.D., Detroit.

(Continued on Page 1490)

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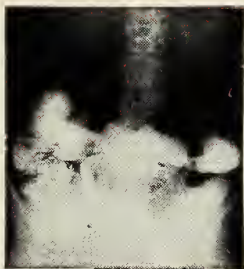
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(Continued from Page 1488)

In general the chronic degenerative diseases, neurological diseases, sensory disorders, mental disease and severe injuries due to accidents make up the major health problems for the nation as a whole. All age groups are represented among those afflicted by these conditions whose one common characteristic is prolonged duration. Care of the "long-term patient" is, in fact, the chief health problem for the physician and the patient's family, for the community, and for the nation as a whole.—L. E. BURNEY, M.D., *California Medicine*, January, 1956.

* * *

Walter F. Carey, Detroit, Chairman of The Association Committee of the Chamber of Commerce of the United States, addressed the American Society of Association Executives in annual session in St. Louis last month. Some of his remarks—aimed at associations in general—are particularly pertinent to professional societies:

"The simple fact of existence, legislatively at least, in these complex days, dictates that groups adversely affected by legislative proposals either mobilize their resources to defend themselves or be overwhelmed. The individual, operating within the constitutional grant of right of petition, finds the right virtually useless unless he employs it in concert with others.

"All business activity in this country is increasingly subject to rules, regulations and statutes which penetrate deeply into the very heart of its operation. A lone voice, however loud and vigorous, raised in the legislative forum, is lost.

"In every sphere of human activity, we have all learned that only the chorus of voices has the decibel count to be heard, and that the right of petition can be exercised effectively only in concert with similar expression by others.

"So . . . as I have said . . . the function of the voluntary organization is to serve, as the magnetic screen or the chemical precipitant. It searches out of the immense volume of facts, figures and opinions bearing on its members' interests, those selective items of special interest or critical importance. Over a period of time, it examines the cumulative items it has winnowed, and from these, the astute management of the association determines trends—a task also beyond the capacity of the lone individual unit. Finally, it often must mobilize the resources of those it represents for constructive action or defense."

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September 29—To Save a Life—(Film—"To Save a Life")

(Continued on Page 1492)



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*REFERENCE: J.A.M.A. 163: 359, 1957 (February 2)

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SEARLE

Research in the Service of Medicine

(Continued from Page 1490)

The Michigan Heart Association has released a brochure entitled "Publications and Teaching Aids for Physicians," which describes all the various professional materials available from the Michigan Heart Association that are useful to physicians. In most cases these booklets are free of charge. For a copy of the brochure, write Michigan Heart Association, 3919 John R. Street, Detroit 1.

* * *

A return post card recently received by one of our doctors, reads on one side—"Dear Doctor: Don't throw away your surplus drugs or samples, I will buy them from you. I pay a fair, honest price. Please write or phone." A name and address are given, also a telephone number, and a note—"No toll charge." On the reverse side are three lines—"You may call on me." "My office hours are ———, except———" "Best time to call," and a place for address and signature. To the best of our knowledge, most of the samples left for doctors are marked, "Not to be sold." We understand that members of the pharmaceutical profession are much disturbed about this mail solicitation.

* * *

As "Boss" Kettering defines research—"Research is a high-hat word that scares a lot of people. It needn't.

It is rather simple. Essentially, it is nothing but a state of mind—a friendly welcoming attitude toward change. Going out to look for a change instead of waiting for it to come. Research, for practical men, is an effort to do things better and not to be caught asleep at the switch. The research state of mind can apply to anything; personal affairs or any kind of business, big or little. It is the problem solving mind as contrasted with the let-well-enough-alone mind. It is the composer mind instead of the fiddler mind. It is the 'tomorrow' mind instead of the 'yesterday' mind." (From—*You and Your Industry*, Scientific Apparatus Makers Association Bulletin, August, 1957).

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Acknowledgments of all books received will be made in this column, and this will be deemed by us as full compensation to those sending them. A selection will be made for review, as expedient.

CLINICAL ELECTROCARDIOGRAPHY. Part I. The Arrhythmias, with an Atlas of Electrocardiograms. By Louis N. Katz, A.B., M.A., M.D., F.A.C.P., Director, Cardiovascular Department, Michael Reese Hospital, Chicago, Illinois; Professional Lecturer in Physiology, University of Chicago, Chicago, Illinois, and Alfred Pick, M.D., Physician-In-Charge of Heart Station and Research Associate, Cardiovascular Department, Michael Reese Hospital, Chicago, Illinois. Illustrated With 415 Engravings. Philadelphia: Lea & Febiger, 1956. Price \$17.50.

This seven hundred page book is printed on a fine grade of paper and excellently bound. The opening pages contain a very thorough discussion of the anatomy and physiology of the heart. From here the reader is led logically and systematically to a discussion of the cardiac arrhythmias. The material covers the mechanism, treatment, and electrocardiographic diagnosis. Newer concepts of pathophysiology and treatment are extensively discussed. Every known type of arrhythmia is presented. Many electrocardiograms and illustrative cases make this an exceedingly valuable volume.

The bibliography and index are among the best this reviewer has ever seen.

This book should be in the library of every physician seriously interested in cardiology and electrocardiology.

L.P.S.

PRINCIPLES OF CLINICAL ELECTROCARDIOGRAPHY. By Mervin J. Goldman, M.D., Assistant Chief of the Medical Service, and Cardiologist, Oakland Veterans Administration Hospital, Oakland; Assistant Clinical Professor of Medicine, University of California School of Medicine, San Francisco. Los Altos, California: Lange Medical Publications. Price \$4.50.

This paper bound book has 306 pages and an adequate index. The basic principles of electrocardiography are briefly presented. Special attention is paid to the unipolar leads. The genesis of the complexes from the different portions of the heart is well explained both by

(Continued on Page 1496)

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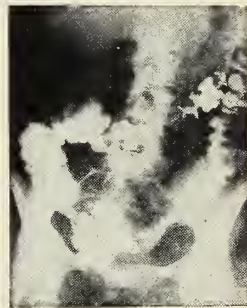
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words and diagrams. The effect of heart position on the electrocardiogram is especially well done by diagrams. The atrial arrhythmias are adequately covered, the unitarian theory being followed. Arteriosclerotic heart disease in all its phases is satisfactorily explained, as are bundle branch block and the ventricular arrhythmias. The chapter on the effects of drugs and electrolytes on the cardiogram is sketchy.

In summary, this is a fine, concise book especially valuable to the beginner in electrocardiography and the medical student. The explanations are good; the diagrams, excellent. Those responsible for the latter have done an outstanding job. The book deserves a better binding.

L.S.

MODERN PERINATAL CARE. By Leslie V. Dill, M.D., F.A.C.S., Diplomate of the American Board of Obstetrics and Gynecology, Associate Clinical Professor, Obstetrics and Gynecology, Georgetown University School of Medicine; Consultant Obstetrics and Gynecology, Army Medical School and Walter Reed General Hospital; Staff Member, Obstetrics and Gynecology, Providence Hospital, Washington, D. C. New York: Appleton-Century-Crofts, Inc., 1957. Price \$6.50.

This is one of the most comprehensive, well-written books to date on modern perinatal care. The material is presented briefly and concisely and offers modern techniques for the total care of the woman from early in pregnancy through both the second and third stages and the postpartum period. It defines the physiological

limits for normal pregnancy, clarifies the present trends in prophylaxis and therapy for the normal pregnant woman and defines effective methods and therapies for treating the many pathological conditions which may occur during pregnancy and its complications. Much of the material is designed for those physicians who have had limited specialization training and offers to them acceptable treatment until consultation is available. There is an excellent chapter on Erythroblastosis; this very difficult subject is presented in a very simple but complete analysis of the subject. The last chapters include important data on the use of records, medicolegal information, and the religious problems encountered in any obstetric practice. The chapter titled "The Practice of Obstetrics and the Law" is especially well presented as it covers the many problems which present themselves to those physicians engaged in this type of practice.

This is an invaluable book for all physicians doing obstetrics, as well as those who are still in their training phase.

J.R.P.

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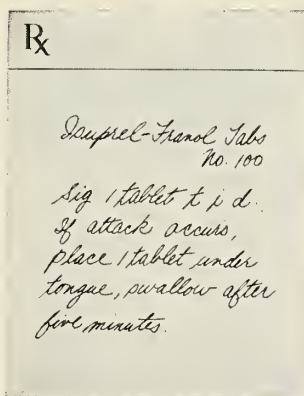
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1. Fromer, J. L., and DeRisio, V. J.: *Lahey Clin. Bull.* 10:45, Oct.-Dec., 1956.

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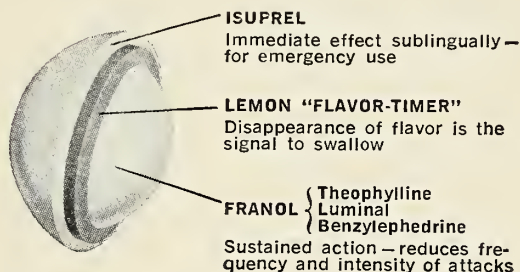
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Standing Orders for Nurses in a Mass Disaster

To facilitate prompt and efficient treatment of cases in a Mass Disaster, where the nurse may be called upon to act independently of physicians, the following points are important:

1. Nursing practices should be standardized over wide areas.
2. Nursing practices should be mutually understood by both the medical and the nursing professions.
3. The psychological aspects should be kept in mind at all times.

I. PRIORITIES FOR IMMEDIATE TREATMENT AND PROMPT EVACUATION TO NEXT TREATMENT CENTER (EXCEPT FOR OBVIOUSLY MORIBUND PATIENTS) ARE AS FOLLOWS:

- A. Massive hemorrhage
- B. Asphyxia
- C. Chest Wounds
- D. Shock
- E. Abdominal Wounds
- F. Burns and Crush Injuries
- G. Head and Spine Injuries

NOTE: Emotionally disturbed patients may have to be segregated.

II. IDENTIFICATION

Make certain each patient has an emergency medical tag. Fill in all required data.

III. RELIEF OF PAIN; NARCOTICS

A. Dosage for adults:

Drug	Dosage
Morphine	gr 1/6 to gr 1/4
Codeine	gr 1/4 to gr 1/2
Demerol	mg 50 to mg 100
Dilaudid	gr 1/32 to gr 1/20
Pantopon	gr 1/6 to gr 1/3

NOTE: For aged and/or small individuals smaller doses must be used.

B. Dosage for children: Young's Rule

Age of child = proper fraction of adult dose.

$$\frac{\text{Age} + 12}{8 + 12} = \frac{8}{20} = \frac{2}{5} \text{ of adult dose}$$

C. Narcotics are for relief of pain only. Not to be used for restlessness, apprehension, agitation hysteria.

IV. HEMORRHAGE

- A. Pressure dressing—maintain pressure
- B. Elevate part
- C. Tourniquet should be applied *only* for life-endangering hemorrhage that cannot be controlled by any other means. Once applied, a tourniquet should *not* be released regardless of the time interval elapsed except by a physician who is prepared to control the hemorrhage and to replace blood volume

adequately. A notation "T" should *always* be made on the emergency medical tag giving tourniquet location and time of application.

V. TRAUMATIC SHOCK

- A. Position: Horizontal—prone or supine; elevate feet if blood pressure is below 100 systolic.
- B. Warmth: Use blankets to keep patient comfortably warm.
- C. Vital signs: Frequent check of pulse, blood pressure and respiration.
- D. Administration of fluids:
 1. Intravenous fluids: Glucose, saline or plasma expanders. Blood to be given only on order of a physician.
 2. Emergency oral fluid: Two to three quarts per day consisting of the following solution:

1 teaspoon of salt and 1/2 teaspoon of sodium bicarbonate to each quart of water

If the above is not tolerated or not available any available fluid should be used.
- E. Check for anuria or presence of hematuria
- F. Pain: Do not repeat morphine while patient is still in shock.

VI. FOREIGN BODIES

Leave alone—except if blocking airway

VII. TREATMENT OF INJURIES

A. Lacerations, avulsions and massive wounds:

1. Control hemorrhage (pressure as a rule)
2. Splint deep wounds and crush injuries
3. Relieve pain. Record drug, dose, and time.
4. Soap and water cleansing of wound whenever and wherever possible.
5. Simple sterile dressing.
6. Antibiotics stat intramuscularly or orally. Continue for three days. Ask patient about sensitivity first.
7. Tetanus prophylaxis: for persons previously immunized with toxoid, give on dose of Tetanus Toxoid. Tetanus anti-toxin is to be given only on the order and direction of a physician.

B. Burns:

1. Immediate treatment:
 - (a) Slit constricting clothing. Do not remove unnecessarily as this may be the patient's only protection. Examine for shock and other injuries. Render necessary first aid.
 - (b) Relieve pain. Record drug, dose and time.
 - (c) Simple clean dressing to burned areas.
2. Early definitive treatment:
 - (a) Estimate extent of burn—Rule of 9's

Head	9%
Upper extremities	9% each
Anterior trunk	18%
Posterior trunk	18%
Lower extremities	18% each
 - (b) Give fluids and electrolytes as indicated.

From the Medical and Public Health Division of Civil Defense.

Endorsed by the MSMS Committee on Civil Defense and The Council.

(Continued on Page 1510)

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(Continued from Page 1508)

- (1) Total fluids required during first day: (Oral and/or intravenous)

$$\frac{\text{Percentage of body area burned} \times \text{Weight of patient (in pounds)}}{2.2} + \text{Patient's normal daily fluid requirement (2000 cc for 150 lb. man . . . scale up or down according to wt.)}$$
 Example: Fluid requirements of 150 lb. man with 30% of body surface burned.

$$30 \times 150 + 2000 = 6500 \text{ cc.}$$
 Give in divided doses; $\frac{1}{2}$ in first 8 hours; $\frac{1}{2}$ over next 16 hours.
 - (2) Fluid requirements during second 24 hours are $\frac{1}{2}$ of first day's.
 - (3) Oral salt and soda solution to be used to the greatest extent possible:
1-2-4 Formula
 Water 1 gallon
 Baking soda 2 teaspoonfuls
 Salt 4 teaspoonfuls
 - (c) Treatment based on extent of burn:
 - (1) 15% or less. Oral fluids only. Dress burns, advise and discharge to self care if ambulatory.
 - (2) 15% to 40%. Treat intensively. Oral fluids preferred. Use blood, plasma, and IV fluids only if vomiting or other complications require it.
 - (3) Over 40%. Defer intensive definitive treatment until 15% to 40% group is cared for. Give sedatives, analgesics and narcotics as required.
 - (d) Fluid requirements with extensive burns—short method of computing:
 - (1) Adults: Total fluids required in first 24 hours = 10% of body wt.—5% in second 24 hours.
 - (2) Children: Total fluids required in first 24 hours = 12% of body wt.—6% in second 24 hours.
 (1 Quart or 1 Liter weighs $2\frac{1}{2}$ pounds—Approx.)
 - (e) Treatment of Burned Area
 - (1) No debridement; no sprays; no tannic acid; no ointments.
 - (2) No blisters opened.
 - (3) Apply the standard civil defense burn dressing. If burn dressing is not available, use sterile gauze next to burn, add fluff gauze and hold in a position with roller bandage or ACE type bandage as a pressure dressing. Avoid constriction.
 - (f) Analgesics or narcotics as indicated for pain.
 - (g) Antibiotics stat and for next three days.
- C. Crushing injury with shock:
1. Arrest hemorrhage if present
 2. Immobilize fractures immediately
 3. Treat shock as outlined under Section V
- D. Sucking wounds of chest
1. Immediate occlusive dressing
 2. Relieve pain. Record drug, dose, time.
 3. High priority for evacuation
- E. Abdominal wounds
1. Relieve pain. Record drug, dose, time.
 2. NOTHING BY MOUTH
 3. Simple massive dressings:
 - a. Do not replace viscera
 - b. Do not remove foreign bodies
 - c. Do not explore wounds
 - d. Warm moist saline dressing over exposed viscera if possible
- F. Brain and spinal cord injuries
1. NO MORPHINE. For extreme restlessness may give barbiturate.
 2. Maintain airway
 3. Position:
 - (a) Flat on back and immobilization cord injury
 - (b) Belly down with face to one side brain injury
- G. Fractures
1. Closed Fractures
 - (a) Skull
 - (1) When in doubt, treat as brain injury
 - (2) No narcotics
 - (b) Upper extremity
 - (1) Shoulder, arm and elbow: apply a sling with the elbow at a right angle and then bind extremity to the body with circular bandage
 - (2) Forearm, wrist and hand: mobilize with a basswood newspaper splint and place in sling with the elbow at a right angle.
 - (c) Lower extremity
 - (1) Hip-femur:
 - (a) Thomas splint if available
 - (b) Splint from arm-pit ankle with board; or
 - (c) Tie legs together
 - (d) Relieve pain. Record drug, dose, and time
 - (2) Lower leg:
 - (a) Splint fracture from hip ankle
 - (b) Simple splint for ankle and foot fractures
 - (c) Relieve pain. Record drug, dose, and time.
 - (d) Spine
 - (1) Cervical—face up on litter; mobilize head
 - (2) Dorsal, lumbar:
 - (a) Belly down, head to one side, or flat on back with pillows under small of back
 - (b) Never flex patient or allow sitting position
 - (c) Flat rigid surface
 - (d) Relieve pain. Record drug, dose, and time.
 - (e) Compound fractures:
 Same treatment as for closed fracture plus
 - (1) Dry sterile dressing
 - (2) Penicillin 300,000 units stat and repeat daily for three days (Check history of sensitivity)
 - (3) Relieve pain. Record drug, dose, and time

(Continued on Page 1519)



disappointed with half measures in angina?

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Suggested Schedule for the Treatment of Syphilis, Chancroid, Lymphogranuloma Venereum, Granuloma Inguinale, and Gonorrhea

There is no evidence that a total dosage of more than 4,800,000 units of penicillin for any type of syphilis is necessary. Repeated courses of penicillin do not accelerate the fall in serological titre. In early syphilis, the height of the serologic titre dictates the speed of serologic fall. Low titres become negative quicker than high titres. In late asymptomatic and symptomatic syphilis, the serologic titre may fall slowly but may never become negative. This continued reactivity does not mean the patient needs more treatment. The following suggested treatment schedules do call for somewhat larger total dosage than mentioned previously, but are considered acceptable.

Primary and Secondary Syphilis.—A total dosage of 6 million units of procaine penicillin should be administered, or 4,800,000 units of Bicillin. When daily treatment can be administered, give ten daily doses of 600,000 units (2cc.) of procaine penicillin in either aqueous or oils suspension (P.A.M. may also be used). When more convenient to give treatment twice weekly, use procaine penicillin in oil with aluminum monostearate (P.A.M.) giving 2,400,000 units (8cc.) for the first injection followed by three more injections at three to four-day intervals of 1,200,000 units (4cc.). If benzathine penicillin G (Bicillin or Permapen) is available and weekly injections are more convenient, given 2,400,000 units and repeat this dosage at one week.

Persons Allergic to Penicillin.—Oxytetracycline hydrochloride (Terramycin Hydrochloride) chlortetracycline hydrochloride (Aureomycin Hydrochloride), chloramphenicol (Chloromycetin), erythromycin (Erythrocin, Ilotycin) are considered to be effective anti-syphilitic agents. The first two are more commonly used. Minimal effective doses of antibiotics other than penicillin have not been determined. Schedules most commonly used call for a total dosage of 40 to 60 grams (also influenced by the amount of penicillin the patient may have already received) usually given at the rate of $\frac{1}{4}$ to $\frac{1}{2}$ gram Q.I.D. according to tolerance.

Latent Syphilis.—600,000 units of procaine penicillin given daily for ten days as for primary and secondary syphilis, total dosage 6 million units; or 1,200,000 units P.A.M. given twice weekly for six injections, totaling 7,200,000 units; or benzathine penicillin G 2,400,000 units given weekly for two or three injections.

EDITOR'S NOTE: This is a subcommittee report by L. W. Shaffer, M.D., J. A. Cowan, M.D., and A. C. Curtis, M.D., approved for publication by the Venereal Disease Committee, and The Council MSMS.

Late Symptomatic Syphilis.—Same as for latent syphilis except where neurosyphilis is present would recommend 15 daily doses of 600,000 units of procaine penicillin (9 million units); or 1,200,000 units P.A.M. given twice weekly for four weeks, totaling 9,600,000 units.

Syphilis in Pregnancy.—Therapy same as for primary or secondary syphilis. It is recommended that if labor is imminent that 2,400,000 units of penicillin be given as the first injection and follow-up treatment be continued according to the schedule selected if the patient has not been delivered. Whenever possible a quantitative serologic test should be obtained in *each trimester* of pregnancy. There is always a question as to whether a woman who has acquired syphilis should be treated during each pregnancy. In general, if she has been previously adequately treated and there is no evidence of a relapse or reinfection, additional therapy is unnecessary. However, if there is a question of adequacy of previous treatment, her remaining under close observation, or any evidence of relapse or reinfection, she should, of course, be retreated.

Congenital Syphilis.—Ordinarily congenital syphilis should be treated in the same way as acquired syphilis. The dosage should be assigned according to weight, but slightly over rather than under the proportionate adult dose. Infantile congenital syphilis (under two years of age) should be treated as for primary—secondary syphilis. Late congenital syphilis as for latent, or late syphilis.

Gonorrhea.—1,200,000 units of penicillin should be administered in a single dose in uncomplicated acute or chronic gonorrhea in both men and women. In cases of epididymitis in males, or salpingitis or suspected salpingitis in the females, three doses of 1,200,000 units of penicillin (4cc.) of P.A.M. should be administered on alternate days. If allergic to penicillin, it is recommended that uncomplicated gonorrhea in males receive $\frac{1}{2}$ gram Tetracycline, and repeat in six hours. In gonorrhea epididymitis and gonorrhea in females, give $\frac{1}{4}$ gram Tetracyclines q6h for twelve doses (3 grams). If Tetracyclines are not available, give sulfonamides (Triple sulfa or Gantrisan) 1 gram Q.I.D. for five days and repeat if indicated.

Chancroid.—Sulfonamides (Triple Sulfonamides (Triple Sulfa or Gantrisan) 1 gram Q.I.D. for seven days. Tetracyclines, Chloramphenicol, or

(Continued on Page 1606)

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Gerontology Conference

A Conference for Physicians and all other persons interested in the over-all care of older people will be held in Ann Arbor, Michigan, January 13, 14 and 15, 1958. It is being co-sponsored by the Michigan State Medical Society, the Michigan Society of Gerontology and the Department of Post-Graduate Medicine of the University of Michigan Medical School.

The program which follows stresses the importance of all aspects of the care of older persons, and therefore should be of interest to physicians, sociologists, legislators and all related personnel working with the aging. The speakers and the audience will actively participate in a discussion of many interrelated subjects at all of the sessions.

MONDAY, JANUARY 13

9:00 REGISTRATION—Rackham Building Lobby

Morning—First Session

Rackham Building Assembly Hall

A Co-ordinated Team Approach to the Problems of Our Aging Population

Presiding: A. HAZEN PRICE, M.D., Detroit, Michigan

- 9:30 Greetings—Michigan State Medical Society and Michigan Society of Gerontology
- 9:45 Purpose of Conference—Meaning of Overall Care
- 10:00 "Family and Individual's Responsibility"
KATHERINE REEBEL, University of Michigan
- 10:15 "Community Obligations"
MRS. MARGARET GUINIFY, Detroit, Michigan
- 10:30 "Medicine's Responsibility"
CHARLES W. SELLERS, M.D., Detroit, Michigan
- 10:45 "State and Federal Responsibility"
BARRETT LYONS, Lansing, Michigan
- 11:00 Panel Discussion
With audience participation
- 12:00 Luncheon
Michigan League—Michigan Society of Gerontology Business Meeting

Afternoon—Second Session

Amphitheater of University Hospital
Medical, Family and Community Responsibility in the Care of Older Cardiac and Diabetic Patients With All the Psychologic and Economic Implications

Presiding: JACK ROM, M.D., Detroit, Michigan

- 2:00 "Heart Disease Later in Life"
Presentation of Cases
Discussion by PAUL BARKER, M.D., Ann Arbor, Michigan
- "Diabetes in the Elderly Patient"
Presentation of Cases
Discussion by LAURENCE F. SEGAR, M.D., Detroit, Michigan
- Panel Discussion—Internists, Psychiatrist, Dietitian and Social Case Worker, with audience participation.

Evening—Community Night

At Michigan League

Presiding: A. C. FURSTENBERG, M.D., Dean, University of Michigan Medical School

Reports on Community Projects for the Aging Throughout the State—Detroit, Lansing, Flint, Muskegon

Address: "The Healing Power of the Mind and Body"

RUSSELL L. DICKS, D.D., Duke University Divinity School

TUESDAY, JANUARY 14

Morning—Third Session

Rackham Amphitheater

Problems of Long-Term Illness

Presiding: PROFESSOR WILBUR COHEN, Ann Arbor, Michigan

- 9:00 "Chronic Disease Detection"
VLADO A. GETTING, M.D., Ann Arbor, Michigan
- 9:15 "Community Education Programs"
ANTHONY LENZER, Ann Arbor, Michigan
- 9:30 "Hospital and Home-Care Programs"
SIDNEY A. CHAPIN, M.D., Dearborn, Michigan
- Coffee Break
- 10:15 "Nursing Homes and New Standards"
A. E. HEUSTIS, M.D., Commissioner, Department of Health, Lansing, Michigan
- 10:30 "What Can Be Done for the Mentally Frail and Mentally Ill?"
MOSES FROHLICH, M.D., Ann Arbor, Michigan
- 11:00 Panel Discussion
With audience participation

Afternoon—Fourth Session

Amphitheater of University Hospital
Rehabilitation of Patients with Long-Term Illness, Medical, Family and Community Responsibility With All the Psychologic and Economic Implications

Presiding: FRED C. SWARTZ, M.D., Lansing, Michigan

- 2:00 "Hemiplegia (stroke)"—Presentation of Cases
Discussion—FRED SWARTZ, M.D., Lansing, Michigan
- Arthritis in the Older Patient—Presentation of Cases
Discussion—W. D. ROBINSON, M.D., Ann Arbor, Michigan
- Panel Discussion—Internists, Psychiatrist, Psychiatrist, sociologist, visiting nurse and nursing home operator with audience participation.

Tuesday Evening—Banquet

Presiding: GORDON ALDRIDGE, East Lansing, Michigan

Reports on Organizational and State Planning for the Aging

Address: "The Role of Members of the Gerontological Society in Promoting the Welfare of Older People"

WILMA DONAHUE, Ph.D., Ann Arbor,
Michigan
President, Michigan Society of Gerontology

Adjournment—Annual Conference Michigan Society of Gerontology

WEDNESDAY, JANUARY 15

Morning Session

Amphitheater of University Hospital
Clinical Problems of the Elderly Patient

Presiding: H. W. Woughter, M.D., Flint, Michigan

10:00 Presentation of Cases

STAFF MEMBERS OF UNIVERSITY HOSPITAL

"Fractures"

"Peripheral Vascular Disease"

"Prostatic Obstruction"

"Procidencia"

"Medical Evaluation Pre-operatively"

"Types of Anesthesia"

Information:

Registration—Registration fee for the conference is \$2.00.

Rooms—A block of rooms has been reserved at the Michigan Union. Write directly to the Michigan Union, Ann Arbor, Michigan, for your room reservation stating that you are attending the Gerontology Conference and giving dates of arrival and departure.

Advance Registration—Special permits for restricted campus parking lots will be mailed to those registering in advance.

STANDING ORDERS FOR NURSES IN A MASS DISASTER

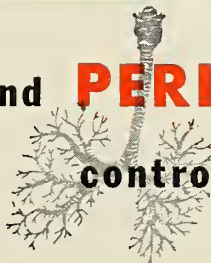
(Continued from Page 1510)

- (4) Tetanus prophylaxis. For persons previously immunized with toxoid give one dose of tetanus toxoid. Tetanus antitoxin to be given only on the order and direction of a physician

VIII. RESPIRATORY OBSTRUCTION (Asphyxia)

- A. Respiratory obstruction, from whatever cause, requires immediate treatment.
- B. Remove foreign bodies from airways (false teeth, vomitus, etc.)
- C. Keep airways open:
 1. Turn head to side.
 2. If unconscious, lift up the lower jaw.
 3. If necessary, pull tongue forward. Hold out with safety pin through tongue.
- D. If breathing has stopped, as from drowning, electric shock, exposure to smoke or gases, start *artificial respiration*. Keep up artificial respirations as long as there are signs of life or until patient resumes spontaneous breathing.
- E. Keep a close watch on all post anesthesia patients to prevent respiratory obstruction by mucous, vomitus, tongue swallowing, etc. Position unconscious patients on side. Check skin color and respirations frequently until fully reacted.

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Menthol	1.0 mg.
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1958 MICHIGAN CLINICAL INSTITUTE

Only information of practical value in daily practice will be found at the 1958 Michigan Clinical Institute, to be held at the Sheraton-Cadillac Hotel, Detroit, March 19-20-21 (program begins on page 1589). All subjects on the MCI Program are applicable to clinical medicine. The 1958 Institute is a concentrated refresher course of great value to Michigan practitioners of medicine.

Well over 3,000 will be registered (last year's total attendance was 3,243), so *secure your hotel reservations now.*

PAYMENT FOR CARE OF MILITARY PERSONNEL (not "Medicare")

Military personnel of the Army, who are on authorized absence, should have in their possession Department of Army Form No. 31, "Request and Authority for Absence." The reverse side of this form contains instructions pertaining to medical treatment or hospitalization that may be required while a military person is absent from his home station. Failure to follow these instructions sometimes results in delay in processing bills for care provided by civilian physicians and hospitals. Physicians and hospitals who treat military personnel are urged to assist them in notifying the proper military authorities.

The processing and payment of bills for the care of military personnel should not be confused with the Medicare Program for dependents.

WHAT'S YOUR ZONE NUMBER, DOCTOR?

The U. S. Post Office Department has issued a new requirement that the postal zone be included in all addresses for mail other than first class. Since MSMS has considerable materials to send to you that do not require First Class postage, we would appreciate your executing the following coupon and returning to the Michigan State Medical Society, P. O. Box 539, Lansing 3, Michigan. This will allow us to check your mailing address and add your zone number to our address plates. Thank you.

WILFRID HAUGHEY, M.D., *Editor*

Name:

Address:

City: Zone:.....

(Please print or type throughout)

INTERNATIONAL ACADEMY OF PROCTOLOGY AWARD CONTEST

The International Academy of Proctology announces its Annual Cash Prize and Certificate of Merit Award Contest for 1957-1958. The best unpublished contribution on proctology or allied subjects will be awarded \$100.00 and a Certificate of Merit. The winning contribution will be selected by a Board of impartial judges, and all decisions are final.

The formal award of the First Prize, and presentation of other Certificates, will be made at the Annual Convention Dinner Dance of the International Academy of Proctology, April 11, 1958, at the Hotel Del Prado, Mexico City, Mexico.

The International Academy of Proctology reserves the exclusive right to publish all contributions in its official publication, "The American Journal of Proctology." All entries are limited to 5,000 words, must be typewritten in English, and submitted in five copies. All entries must be received no later than the first day of February, 1958. Entries should be addressed to: Alfred J. Cantor, M.D., International Secretary, 147-41 Sanford Avenue, Flushing, New York.

AMERICAN BOARD OF OBSTETRICS AND GYNECOLOGY

The Part I examinations of the American Board of Obstetrics and Gynecology, are to be held in various parts of the United States and Canada, on Thursday, January 2, 1958, at 2:00 P.M.

Candidates notified of their eligibility to participate in Part I must submit their case abstracts within thirty days of notification of eligibility. No candidate may take the written examination, unless the case abstracts have been received in the office of the Secretary. Re-submitted cases were due November 1, 1957.

Current bulletins outlining present requirements may be obtained by writing to the Secretary's office: Robert L. Faulkner, M.D., 2105 Adelbert Road, Cleveland 6, Ohio.

CONFERENCE ON CARE OF THE OLDER PERSON

A Conference for Physicians and all others interested in the care of older persons will be held at Ann Arbor, January 13, 14, 15, 1958. It is being co-sponsored by the Michigan State Medical Society Geriatrics Committee and the Michigan Society of Gerontology.

Live clinics will be held each day at the University Hospital, and all aspects of the care of the patient will be covered—while the medical car

(Continued on Page 1522)

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CARE OF THE OLDER PERSON

(Continued from Page 1520)

will be particularly stressed for the physicians present, including psychiatric evaluation and care, the sociologic, psychologic, economic and home-care phases will also be included.

Our population is growing older, and it behooves all physicians to familiarize themselves, more than ever before, with the many aspects of the overall care of the geriatric patient.

HIGHLIGHTS OF THE EXECUTIVE COMMITTEE OF THE COUNCIL

Meeting of October 16, 1957

- **Total registration** at the 92nd Annual Session, Grand Rapids, was 3,290, including 1,595 M.D.'s.
- **Site for New Building of MSMS.**—The Site Committee presented a report on various locations available. None was considered adequate, and the Site Committee was requested to continue its investigation.
- **Meeting conflicts** in March and September were reported and thoroughly discussed. The Executive Committee developed a resolution: "That MSMS feels that the months of March and September, annually, should be left open for the statewide meetings sponsored by the Michigan State Medical Society and that ancillary groups, hospitals, and medical schools be respectfully requested to refrain from scheduling statewide meetings during these months, to the end that all members of the Michigan State Medical Society may be given adequate opportunity to attend the MSMS meetings."
- **Opinion Study on Prepaid Medical Care Coverage in Michigan:** The Executive Committee received so many requests for copies of this report that it authorized the printing of 1,000 additional copies in complete form.
- **Motion picture on costs of medical care** was authorized to be made by MSMS.
- **1958 Michigan Clinical Institute:** Assembly Chairmen appointed were H. K. Ransom, M.D., Ann Arbor, E. J. Lauretti, M.D., Muskegon, R. W. Waggoner, M.D., Ann Arbor, M. S. Chambers, M.D., Flint, Wm. S. Reveno, M.D., Detroit, D. W. Thorup, M.D., Benton Harbor and F. E. Luger, M.D., Saginaw. Assembly Secretaries appointed were N. J. Hershey, M.D., Niles, A. H. Ulmer, M.D., Port Huron, S. E. Chapin, M.D., Dearborn, T. J. Trapasso, M.D., Sault Ste. Marie, and G. E. Millard, M.D., Detroit.
- **Change in Schedule for MSMS Annual Sessions:** In 1958 and subsequently, the Annual Session will begin on Tuesday at 2:00 p.m. and end Friday at 1:00 p.m., to take advantage of the more popular Tuesday evening for meetings of ancillary groups and to permit wet clinics, when desired, on Friday afternoon. Al-

so, a larger daytime attendance on Tuesday can be anticipated than on Friday.

- **Council Chairman, D. Bruce Wiley, M.D.,** of Utica, announced the personnel of all Committees of The Council for 1957-58.
- **Legal Counsel, Lester P. Dodd,** reported that the Koppasch case of Allegan County had been dismissed so far as MSMS is concerned. The court held that the issue of conspiracy had not been established.
- **The Beaumont Memorial Foundation:** Incorporation has been accomplished and the following officers have been elected: President, Otto O. Beck, M.D., Birmingham; Vice President, W. M. LeFevre, M.D., Muskegon; Secretary-Treasurer, Wm. J. Burns, LL.B., Lansing.
- **Several matters of mutual interest** were discussed with Michigan Health Commissioner A. E. Heustis, M.D., including influenza, paralytic poliomyelitis, hearing on radiation standards (set for October 31), rheumatic fever prophylaxis, nursing home licensing and possibility of research project on standards of screening for cardiovascular diseases.
- **Appointments:** I. A. LaCore, M.D., of Pontiac to represent MSMS at the fourth annual conference of Mental Health Representatives of State Medical Societies, Chicago, November 22-23; W. B. Harm, M.D., Detroit, as Appeal Board member, North Central Area, Selective Service System; Wilfrid Haughey, M.D., to State Medical Journal Advertising Bureau Conference, Chicago, October 28-29; Max L. Lichter, M.D., Melvindale, to attend the Civil Defense Meeting of the AMA, Chicago, November 9-10.

WHAT THEY THOUGHT ABOUT THE MSMS ANNUAL SESSION

Max Cutler, M.D., Beverly Hills, California (guest essayist): "I want to say a word about the organization of your meeting. Over the years I have naturally been on many programs throughout this country and other parts of the world but I can truthfully say that I have known no group who prepared for the meeting in the comprehensive way you have done. The minute detail you have attended are simply wonderful and I do want to congratulate you and your group on this approach."

Douglas T. Davidson, Jr., M.D., Philadelphia (guest speaker): "I can frankly say that I am greatly impressed by the efficiency of your State Medical Society Assembly Committee. No detail was overlooked in the effort to assure the speakers what was expected of them at what time and where, and long enough in advance and often enough that they couldn't forget. I was even more impressed by your warm hospitality from the moment I stepped off the plane, through my stay in Grand Rapids until I reluctantly returned to the workshop here. It was a real treat for me from beginning to end. Meetings with your group was a stimulating and most enjoyable experience which I shall look forward to repeating whenever the opportunity permits."

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Supplied: 10 cc. multiple-dose vials. The adult dosage is 25 mg. to 50 mg. (1-2 cc.) intramuscularly, 3 to 4 times daily, at 4 hour intervals. The moderated dosage level for children under 12, when given intramuscularly, has not yet been established, and the oral dosage should be used.



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AMA Washington Letter

THE MONTH IN WASHINGTON

Health Research Money

Just how much money does the federal government spend on health programs and just how is it spent?

The answers are not easy to come by, but each year the Washington Office of the American Medical Association gathers together all of the bits and pieces of information needed to explain where and how the U.S. is involved in medicine, from cancer research to treating workmen's sniffls. Some of the material comes directly from appropriation bills, but where programs and projects are not identified there, the responsible government officials are consulted for the breakdown.

For all health and medical purposes, the U.S. during the current fiscal year is spending approximately two and one-half billion dollars. This—despite months of economy talk in the administration and in Congress earlier in the year—is about the same figure as last year.

The survey also unearthed some interesting side-lights that show perhaps more graphically than the dollar marks the extent to which federal medical activities are spreading among almost all agencies and departments.

At least twenty-three U.S. cabinet departments and independent agencies are engaged in some medical operations, and there are at least seventy-nine separate health-medical activities worthy of listing and describing. Many of these in turn are responsible for scores and scores of individual operations.

This year the relatively new Department of Health, Education and Welfare tops the list of all departments in health-medical spending with \$849,394,800, bounding past Veterans Administration and Defense Department, which up to now have been at the head of the column. VA is spending \$849,374,000, within \$20,000 of HEW, but Defense Department this year drops back more than \$80 million, to \$702,000,000, largely because the decreasing size of the armed forces means fewer uniformed men and dependents to care for.

Next comes Atomic Energy Commission, but its medical spending of \$40 million—mostly for research—is far down the column from the Big Three.

International Co-operation Administration has \$37 million to help our friends overseas to raise their medical standards. The other 19 departments and agencies have substantially less, the last item being the \$12,145 allocated to the physi-

cian entrusted with keeping members of Congress as healthy as possible.

For the first time the AMA report compiles information on the programs in which the U.S. participates for payments because of disability. Among those receiving these payments are veterans, disabled beneficiaries under social security, disabled railroad workers, etc.

Because this money is not all federal and comes from several tax sources—OASI and railroad payroll deductions as well as general U.S. revenue—it is not added to other federal medical costs in the AMA study. For the current fiscal year the total of these "payments for disability" is about \$3.2 billion.

NOTES: Federal Trade Commission and Food and Drug Administration joined together to warn drug manufacturers against using "false and misleading claims" to promote drug products for use against Asian influenza. It was pointed out that vaccine is the only protection, and that a physician is needed if there are complications.

* * *

Meeting at the invitation of the Children's Bureau, a group of specialists in the health fields discussed use of X-rays of the newborn and pregnant women and concluded that restraint must be exercised.

* * *

There has been remarkable progress in the last five years in the fight against tuberculosis, but there are still at least 250,000 active cases in the United States. This is the gist of a special nationwide survey by Public Health Service and the National Tuberculosis Association.

* * *

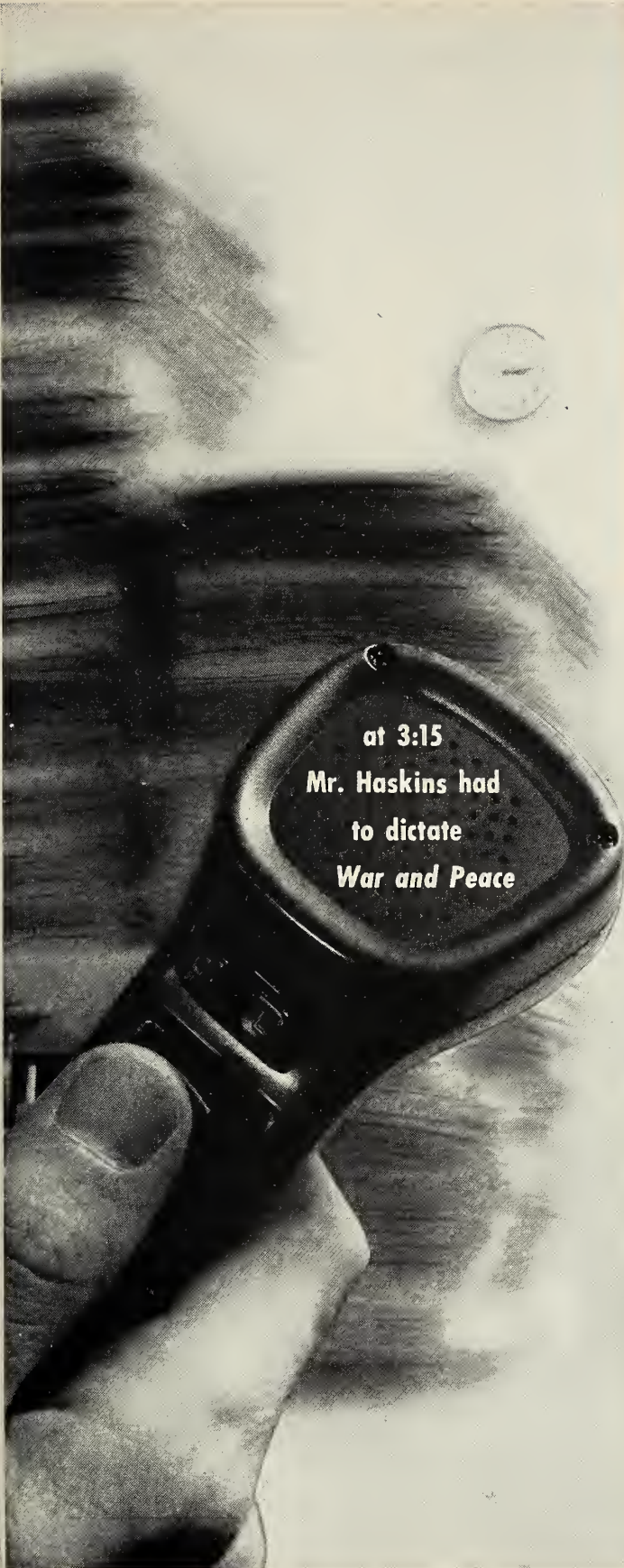
While visiting Russian women scientists were telling of a 25-cent drug to treat Asian influenza, it was learned that some members of the Russian Embassy staff in Washington had been vaccinated with American vaccine.

* * *

In a major address, President Eisenhower pleaded for more private financial aid to medical colleges and warned against the dangers of federal controls in this field.

* * *

Reversing a previous policy, the Internal Revenue Service now says it is possible for a group of doctors to practice as an "association," thereby qualifying for approximately the same tax benefits they would receive under the proposed Jenkins-Keogh law.



To cut daytime lethargy
(and keep rauwolfia potency)
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to dictate
War and Peace

Additional clinical evidence¹ supports the view that HARMONYL offers full rauwolfia potency coupled with much less lethargy. In a new comparative study HARMONYL was given at the same dosage as reserpine and other rauwolfia alkaloids. Only one HARMONYL patient in 20 showed lethargy, while 11 patients in 20 showed lethargy with reserpine; 10 in 20 with the alseroxylon fraction.

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1. Winsor, Travis: Comparative Effects of Various Rauwolfia Alkaloids in Hypertension; submitted for publication.

AMA News Notes

INDUSTRIAL HEALTH CONGRESS IN MILWAUKEE

Maintaining high standards of health in industry will be a principal topic of consideration at the 18th annual Congress on Industrial Health to be held January 27-29 at the Schroeder Hotel in Milwaukee. Physicians, nurses, industrial hygienists, engineers and others interested in the field will attend the meeting sponsored by the AMA's Council on Industrial Health.

Recent developments in industrial health programs and various aspects of immunization programs in industry will be among the subjects covered by panelists at a special session co-sponsored by chairmen of state medical society committees on industrial health. Other features include three technical sessions on: (1) general aspects of disability evaluation; (2) industrial dermatitis, causes and evaluation of disability; (3) low back pain, cause, treatment, evaluation of disability, rehabilitation.

NEW EXHIBITS IN 1958

To reach more and more Americans with authentic up-to-date health information, the AMA's Bureau of Exhibits announces a number of major plans for 1958. First, a new exhibit titled "How We Breathe" will be ready for bookings after January 1, 1958. This exhibit will present a three dimensional model of the organs involved in breathing—the nose, pharynx, larynx, bronchial tubes and lungs. Other features include actual preserved human lungs; a unit to demonstrate the mechanism of breathing and the part played by the diaphragm and rib cage, and a section showing the exchange of oxygen from the lungs to the blood and carbon dioxide from the blood to the lungs.

Two other exhibits also are well along in the planning stages for next year: (1) the brain and nervous system, featuring a human brain embedded in plastic and (2) the endocrine system. Further details will be announced later.

Finally, small editions of the popular "Life Begins" exhibit are being built, incorporating most of the information in the large exhibit but displaying only one fetus embedded in plastic. Other fetuses in varying stages of development will be shown pictorially. This

type of exhibit is extremely lightweight and should prove most attractive to those medical societies far away from Chicago.

TWO "NOMENCLATURE" INSTITUTES IN 1958

So popular have the Nomenclature Institutes been that the American Medical Association again plans to sponsor two more of these short courses during 1958. The first will be conducted March 31 to April 2 at Tulsa, Oklahoma. The second will be held in July in Boston. These three-day meetings are planned by the AMA as a special service to medical record librarians and others working with the *Standard Nomenclature of Diseases and Operations* in the hospital, clinic or doctor's office. Lectures are given by Edward T. Thompson, M.D., Nomenclature editor, and chief, intermural research activities, division of hospital facilities, USPHS, Washington, D. C., and Adaline C. Hayden, C.R.L., Nomenclature associate editor. Queries should be sent to the AMA.

FIRST COME, FIRST SERVED

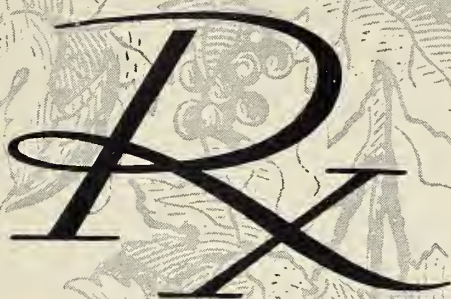
It's time for medical societies to begin planning for 1958 county and state fairs. The AMA Bureau of Exhibits urges all medical societies to arrange for bookings of specific health exhibits as soon as possible. A number of commitments for some of the more popular exhibits have already been made.

SURVEY OF COUNTY MEDICAL SOCIETIES

Replies to the questionnaires sent to county medical societies concerning their activities and programs have been tabulated and published in booklet form by the AMA's Council on Medical Service. The booklet—"1957 Nationwide Survey on County Medical Society Activities"—contains information on types of county medical society programs (such as emergency call systems or grievance committees), fee schedules, life insurance, attendance at meetings and dues. Copies will be sent to all county and state medical societies. Additional copies may be secured from the Council.

MEDICAL MEETINGS AND CLINIC DAYS

1958		
Jan. 13-15	11th Annual Michigan Rural Health Conference	Ann Arbor
Jan. 22-23	Physicians conference on Gerontology and Michigan Gerontology Society	Ann Arbor
Feb. 1-2	MSMS County Secretaries—Public Relations Seminar, Statler Hotel	Detroit
Feb. 12	Genesee County Medical Society—Maternal Health Day	Flint
March 19-21	Michigan Clinical Institute, Sheraton-Cadillac Hotel	Detroit
April 9	Genesee County Medical Society—Cancer Day	Flint
Spring	MSMS Postgraduate Extramural Courses	Statewide
May 14	Conference on Rehabilitation—Kellogg Center	East Lansing
	Michigan State University	



why wine in geriatrics and convalescence?

Convalescents, regardless of their years, share many of the tonic and recuperative needs of the aged, and wine is probably more widely recommended in the care of these patient groups than in any other.

Many generations of physicians have warmly advocated not only dry table wines but also sweet dessert wines of many varieties for their nutritional value in elderly and convalescent patients.

Now modern research supplies the *raison d'être* by clearly showing that wine not only supplies quick fuel but also serves to stimulate the desire for food where appetite is poor.

WINE AIDS DIGESTION—Wine has been found to increase salivary flow,¹ stimulate gastric secretion² and facilitate the gastrocolic reflex.³

WINE FOR GENTLE, SAFE SEDATION—Described as the safest of all sedatives, wine can often dispel the anxieties, fears and emotional pressures of old age and prolonged illness. The relaxation of gastric tension produced by moderate amounts of wine may be a significant factor in the prevention of dyspepsia. The systemic sedative⁴ and vasodilative⁵ actions of wine can be of great aid in cardiovascular disease.

For a few cents a day your patients can have wines produced from the world's finest grape varieties grown in an ideal climate and handled with consummate skill.

Research information on wine is available on request. Just write for your copy of "Uses of Wine in Medical Practice." Wine Advisory Board, 717 Market Street, San Francisco 3, California.

1. Winsor, A. L., and Strangin, E. I.: *J. Exper. Psychol.* 16:589 (1933).

2. Ogden, E., and Southard, Jr., F. D.: *Fed. Proceedings* 5:77 (1946).

3. Adler, H. F.; Beazell, J. M.; Atkinson, A. J., and Ivy, A. C.: *Quart. J. Studies on Alc.* 1:638 (1941).

4. Salter, W. T.: *Geriatrics* 7:317 (1952).

5. Wright, I. S., Arteriosclerosis, in Steigltz, E. J.: *Geriatric Medicine*, Philadelphia, W. B. Saunders Co. (1949).

PR REPORT

LEGISLATIVE SESSION CONVENES JANUARY 8

The House and Senate will get right down to business on the second Wednesday of the new year, and if they proceed according to previously adopted rules, they will be in Lansing for only eleven weeks.

Only the weightier problems of state are expected to get much attention during this short session as 1958 is an election year. Just how much consideration can be expected on the many anticipated health proposals cannot be predicted.

The MSMS Council and the House of Delegates have made specific legislative recommendations regarding highway safety, enlargement of Wayne's Medical School facilities, annual registration of M.D.'s, narcotics, TB and atomic materials-radiation controls. It looks like a busy three months.

The same committee assignments as last year will prevail. However, House Democrats will have to select a new floor leader to replace resigning minority spokesman Ed. Carey (Wayne County) who was last month elected to the Detroit Common Council.

MOUNTAIN COMES TO MAHOMET IN WAYNE COUNTY

Better communication between state and county medical society is the purpose of a new series of meetings with society officers and hospital staffs in Wayne County.

The program was developed to provide personal contact with as many of the 2,600 members of the County Society as possible.

Commenting on the success of the meetings, Louis J. Bailey, M.D., President of the Wayne County Medical Society, said:

"At each meeting, Society officers have reported on the important activities of both state and local medical organizations. The staffs have displayed high interest in these meetings and out of them have come constructive suggestions that might benefit the Society as a whole."

MSMS representatives covering one or more meetings include Drs. William Bromme, W. B. Harm, M. L. Lichter, G. T. McKean, G. B. Saltonstall, A. E. Schiller, and D. B. Wiley. WCMS official representatives include Doctors L. J. Bailey, C. L. Candler, E. F. Fenton, C. P. Hodgkinson, L. W. Korum, C. I. Owen, F. P. Rhoades, W. L. Sherman, D. N. Sweeny, Jr., and M. R. Weed.

Twenty-one hospitals were visited during October-November, and December with arrangements being handled by Jack Pardee, MSMS Public Relations Field Secretary of the Detroit office.

ATOMIC ENERGY AND HEALTH

The atom and health dominates the 11th Annual Michigan Rural Health Conference with an impressive array of lectures and discussions of special importance to the medical profession. The two-day meeting will be held at the Michigan Union, University of Michigan, Ann Arbor, on Wednesday and Thursday, January 22-23, 1958.

Professional Day—a day set aside especially for doctors of medicine, dentists, nurses, and others with similar interests—is scheduled for Thursday, January 23. The Council of the Michigan State Medical Society has approved the expenses for one delegate from each County Medical Society.

Professional Day Program (10:00 a.m.-12:30 p.m.)

CONFERENCE THEME—THE ATOM AND HEALTH

Chairman: Harry A. Towsley, M.D., Ann Arbor

"Impact of Radiation Fallout"

James V. Neel, M.D., Ann Arbor

PANEL-SYMPOSIUM: "Utilization of Health Personnel in Suburban and Rural Areas in Time of Disaster"

Moderator: Harry B. Zemmer, M.D., Lapeer

"Flint Tornado Experience"

Sidney N. Lyttle, M.D., Flint

"Consumers Power Building Collapse"

Grant L. Otis, M.D., Jackson

"Hospital Organization"

C. Thomas Flotte, M.D., Ann Arbor

"The Atom as a Diagnostic Tool"

William H. Beierwaltes, M.D., Ann Arbor

"The Atom as a Therapeutic Tool"

Frank H. Bethell, M.D., Ann Arbor

While the Professional Day program on Thursday morning is of primary interest to doctors of medicine, many of the other presentations are well worth their attention. The topics and speakers are:

- "Peacetime Application of Atomic Energy"—James Brinson, M.D., Captain, Medical Corps, U. S. Navy Flight Surgeon attached to Surgeon General's Office, Washington D. C. (Wednesday, January 22, 10:45 a.m.)
- "Radiation in Food"—Henry Gomberg, Ph.D., Ann Arbor (Wednesday, January 22, 11:15 a.m.)
- "Effects of Radiation on the Body"—James V. Neel, M.D., Ann Arbor (Wednesday, January 22, 11:45 a.m.)
- "What Makes a Doctor"—A. C. Furstenberg, M.D., Ann Arbor (Part of Panel Presentation, Wednesday, January 22, 1:30 p.m.)
- "Prevention of Home Accidents"—Robert H. Trimby, M.D., Lansing, Secretary, Ingham County Medical Society (Part of Panel Presentation, Wednesday, January 22, 1:30 p.m.)

(Continued on Page 1532)



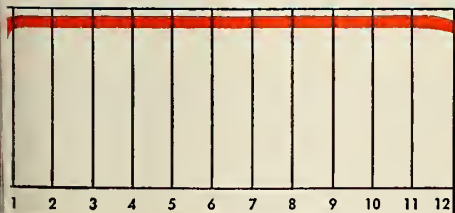
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One Extentab q.8-12 h. or twice daily.
Children over 6—One tab. or two teaspoonfuls Elixir t.i.d. or q.i.d., or one Extentab q.12h.
Children 3-6—½ tab. or one teaspoonful Elixir t.i.d.

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Cancer Comment

BETTER CONTROL OF CANCER OF THE UTERUS

Of the various pelvic malignancies, carcinoma of the cervix is the most accessible. It gives the best opportunity to the physician for observation, early detection, possible prevention and either arrest or cure. Unfortunately, we have been unable to exploit to its full potential these facts in favor of the patient. However, progress is being made—there is unanimity on many aspects of this problem. Medical men are increasing their efforts in this direction—a situation which will likely increase our control of cervical cancer.

During the course of 1957, we shall diagnose 35,000 new cases of cancer of the uterus in the United States. Twenty-six thousand of these, or about 74 per cent, will be cancers of the cervix.

The control that we have established over uterine cancer is well documented by statistical studies:

1. Of patients who are diagnosed early and treated without delay, 70 per cent live the five-year period which we consider a "cure," and the majority of these actually are cured.

2. Only one-third of the patients who present themselves when the disease is moderately advanced survive the five-year period or can hope to be cured.

3. Very few survive for long if they present themselves with advanced cancer and/or metastasis.

In short, early diagnosis and prompt, effective treatment largely predetermine our control of this disease.

While deaths from uterine cancer have been decreasing since 1934, we must note that the reasons for this development are not entirely clear. A variety of factors undoubtedly are involved, such as the taking of more complete and more detailed histories, the performance of more pelvic examinations, the widespread utilization of biopsy, better medical care and the increased awareness on the part of the public of the advisability of immediate medical attention when unusual physical signs and symptoms appear.

However, there is no positive evidence that any one of these factors, or any combination of them is responsible for the 45 per cent decrease in the mortality rate, as reported by the New York State Department of Health.

Only one fact is firmly established. Therefore, of only this one fact can we speak with absolute confidence. The patient whom we can diagnose and treat when her disease is at an early stage is the patient we are most likely to save. It is the certainty of this fact that brings into relief the seriousness of the familiar problem of too many patients presenting themselves to their

physicians for the first time with a clinical picture of advanced cancer.

To cope with this problem, we must act to increase our opportunities for diagnosis early enough to begin treatment when the possibilities for clinical control of the disease are at their optimum stage.

We have the means for the job in cancer of the uterus. The reliability of vaginal cell examination for cancer has been proved by impressive and continuously mounting statistical evidence. One of the great advantages of this method is that it often proves the presence of cancer before clinical signs are visible or palpable.

HARRY M. NELSON, M.D.
*Chairman, Michigan Cancer
Coordinating Committee*

ATOMIC ENERGY AND HEALTH

(Continued from Page 1528)

- "Poison Control Centers"—George H. Lowrey, M.D., Ann Arbor
(Part of Panel Presentation, Wednesday, January 22, 1:30 p.m.)
- "Human Diseases from Animal Carriers"—Franklin H. Top, M.D., Professor of Hygiene and Preventive Medicine, Iowa College of Medicine (Wednesday, January 22, 4:30 p.m.)
- "What Health Means to Me"—Alexander G. Ruthven, Ph.D., President Emeritus, University of Michigan Luncheon Speaker, Thursday, January 23, 12:30 p.m.)

The socio-economic factors in health will be discussed on Thursday, January 23, at 2:00 p.m. in a panel moderated by L. Fernald Foster, M.D., Detroit, Secretary of the Michigan State Medical Society. Panel members and their topics include "The Opinion Study on Prepaid Medical Care Coverage in Michigan" by Hugh W. Brenneman, Lansing, Public Relations Counsel of the Michigan State Medical Society, and "Changes in the Blue Shield Plan" by Jay Ketchum, Detroit, Executive Vice-President and General Manager, Michigan Medical Service. An hour later that same afternoon, William McNary, Detroit, Executive Vice-President and General Manager of Michigan Hospital Service, will take part in a panel-symposium and discuss "The Blue Cross Program in the Hospitals."

Following the Conference theme, "Atom and Health," the annual banquet on Wednesday evening will feature a talk by Robert W. Hartwell, Detroit, General Manager of the Power Reactor Development Company on "The Enrico Fermi Atomic Power Plant." This is the atomic reactor plant now under construction at Monroe, Michigan.

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Osteomalacia, with Emphasis on the More Resistant Forms

By Boy Frame, M.D., and
Richmond W. Smith, Jr., M.D.
Detroit, Michigan

MEDICAL thinking in respect to osteomalacia has undergone considerable revision since the early concept that dietary deficiency was primarily responsible for the skeletal disorder. In 1922, McCollum separated vitamin D from vitamin A, and it was not long before the former was generally recognized as the specific therapeutic agent. In recent years medical attention has turned increasingly to the more unusual and treatment-resistant forms of osteomalacia. It is now apparent that this skeletal defect can occur in persons of unimpaired gastrointestinal function who are receiving the normal requirements of vitamin D. Our interest in the problem has been heightened by studies we have conducted on a middle-aged woman with advanced and treatment-resistant osteomalacia. Observations on this patient are being reported in detail elsewhere. It is our present purpose to review, in general terms, the pertinent knowledge of the lesser known forms of osteomalacia.

Osteomalacia is the skeletal manifestation of a primary defect in calcium and phosphorus metabolism. As far as can be determined by histochemical studies, the normal ground substance in the bones of patients with osteomalacia defines the defect as being one of insufficiently calcified osteoid. In the blood of such patients, the well-known hypophosphatemia and the less consistent hypocal-

cemia appear to be primarily responsible for the mineral-deficient osteoid. Of more biochemical significance is the mathematical product of the calcium and phosphorus concentrations. In normal adults an ionic product of 30 to 40 can usually be determined. A sustained product less than this is likely to result in osteomalacia. Poorly-calcified bone understandably is more susceptible to the usual strains of weight-bearing and muscular activity. This results in an increased stimulation of osteoblasts, which, in turn, leads to the elevated alkaline phosphatase of serum. On the other hand, in advanced osteomalacia complicated by fractures, inactivity and lessened strains may result not only in lowered osteoblastic activity but in actual osteoporosis. In most cases of osteomalacia, one finds chemical evidence of secondary hyperparathyroidism. This compensation tends to restore the serum calcium towards normal, but it may further reduce the serum phosphorus level.

The severity of osteomalacia is quite variable. Skeletal symptoms are frequently vague and often overlooked unless a pathological fracture occurs. Muscular weakness and aching of the lower extremities may be experienced, particularly when walking, and patients with these symptoms may be mislabelled as psychoneurotics. In advanced cases the medical history may reveal a loss in height, and among the limited clinical findings a waddling gait and inconstant bone tenderness may be noted. Initially, one may find only a chemical osteomalacia with low concentrations of serum

Dr. Frame is Associate Physician, Division of General Medicine, Henry Ford Hospital.

Dr. Smith is Physician-in-Charge, Division of Endocrinology, Henry Ford Hospital.

TABLE I. CAUSES OF OSTEOMALACIA

- A. Dietary Deficiencies of Calcium and Vitamin D
- B. Steatorrhea
 - 1. Pancreatic insufficiency
 - 2. Biliary tract obstruction
 - 3. Sprue
 - 4. Other diseases of the small intestines
- C. Renal Insufficiency
 - 1. Idiopathic hypercalciuria
 - 2. Renal tubular acidosis
 - 3. Fanconi syndrome
- D. Vitamin D-Resistant Osteomalacia
- E. In Association with Other Diseases
 - 1. Marble bone disease
 - 2. Healing osteitis fibrosa generalisata
 - 3. Hypoparathyroidism
 - 4. Craniostenosis
 - 5. Neurofibromatosis
 - 6. Wilson's disease
- F. Hypophosphatasia
- G. Of Unknown Etiology

calcium or phosphorus, associated with a normal, or in most cases, an elevated alkaline phosphatase. Later in the disease, pseudofractures develop which usually are accompanied by generalized bony demineralization.

Table I lists etiologic possibilities in osteomalacia based on present knowledge. Dietary-deficient osteomalacia, or rickets, is a rarity in pediatric practice today and with proper prophylaxis should seldom be seen. The pathogenesis of the osteomalacia found in the various types of steatorrhea is fairly well understood. With defective absorption of fat, there is poor transport of calcium and vitamin D. This is the most frequent cause of osteomalacia in this country today.¹ The steatorrhea in such patients may be relatively mild and only careful balance studies will reveal an abnormal fat loss in the stool.

Osteomalacia Due To Defective Renal Mechanisms

The remaining types of osteomalacia are less well understood. Renewed interest in the problem is primarily the result of improved diagnostic methods and our expanding knowledge of renal tubular function. Since renal mechanisms play such an important role in the metabolism of calcium and phosphorus, it is not surprising that defects in renal function are sometimes accompanied by osteomalacia. Simply speaking, the bone softening is the result of hypercalciuria or hyperphosphaturia, severe enough to significantly lower the ionic product of calcium and phosphorus

concentrations in blood. Loss of calcium to this extent is found in two conditions, idiopathic hypercalciuria and renal tubular acidosis. The hyperphosphaturia of patients with the Fanconi syndrome can be so excessive as to also result in osteoid depletion and osteomalacia.

Idiopathic hypercalciuria is thought to result from preceding pyelonephritis, which has led to selective damage to the renal tubules and excessive excretion of calcium.² In a large number of such cases, the invading organism has been identified as *Staphylococcus albus*. The hypercalciuria leads to hypocalcemia, which is followed by increased parathyroid function, hyperphosphaturia and hypophosphatemia. As might be expected, kidney stone formation is the most common complication of this condition, while actual osteomalacia occurs infrequently. Treatment presents a difficult problem in these patients since restriction of dietary calcium to lower urinary excretion may further the demineralization of the skeleton and osteomalacia. On the other hand, if extra calcium and vitamin D are given to prevent skeletal change, there will be a greater tendency towards formation of kidney stones.

Other types of renal tubular damage will result in a variety of metabolic defects. Renal tubular acidosis occurs when the kidney is unable to form an acid urine.³ In this instance a defective ammonia synthesis by the kidney tubule results in an obligatory loss of cations in the urine. This sacrifice of base may involve calcium, potassium, sodium, or all three to varying degrees, and a systemic acidosis results with a persistently alkaline urine. The hypercalciuria leads to nephrocalcinosis, and the negative calcium balance, to osteomalacia. Fortunately, if the disorder is recognized, treatment is quite satisfactory and consists essentially of increasing the intake of base to meet the excessive loss.

Even more complicated renal tubular defects occur which underlie several clinical syndromes with osteomalacia. Dent⁴ has made a significant contribution in his study and classification of these conditions. Most representative, perhaps, is the classical Fanconi syndrome.⁵ Initially, it was felt that this condition occurred only in children under two or three years of age, but more recently a similar clinical and pathological picture has been described in adults.⁶ The congenital defect in renal tubular function results in an excessive urinary loss of amino acids, glucose and phos-

phorus. A systemic acidosis occurs, but its pathogenesis is different from that seen in renal tubular acidosis. In the latter condition the acidosis is secondary to the inadequate ammonia synthesis by the renal tubule and the loss of fixed base. In the Fanconi syndrome, however, the acidosis results from an increased urinary excretion of base which is contingent on the excessive urinary organic acids, primarily amino acids. A combination of factors may contribute to the osteomalacia in the Fanconi syndrome. Not only is there a depletion of serum calcium and phosphorus due to renal wastage, but the systemic acidosis itself may accentuate the demineralization.

A clinical picture resembling the Fanconi syndrome recently has been described in a patient with multiple myeloma.⁷ The acquired damage to the renal tubules was apparent in the glycosuria and excessive amino-aciduria which resulted in a systemic acidosis; eventually, osteomalacia with pseudofractures appeared.

Vitamin D-Resistant Osteomalacia

In general, vitamin D-resistant osteomalacia has become an unsatisfactory term since osteomalacia of diverse etiologies eventually may fall into this category. The osteomalacia in patients with renal tubular acidosis is resistant to vitamin D unless adequate alkali is given to correct the acidosis. Similarly, the osteomalacia of idiopathic steatorrhea is resistant to the vitamin unless the primary absorptive defect is improved by steroids and, perhaps, by a gluten-free diet. Nevertheless, there are cases in which the main defect seems to be a unique resistance to the action of vitamin D. One might compare this to the condition of pseudo-hypoparathyroidism in which there is found an inadequate response of the renal tubules to parathormone—an end organ defect.

Patients with vitamin D-resistant osteomalacia usually are diagnosed in early childhood, primarily because of dwarfism and bony deformities. However, adult forms have also been described. The changes in blood constituents and the x-ray findings are similar to those seen in osteomalacia resulting from dietary deficiencies. Increased fecal calcium and phosphorus without evidence of steatorrhea have been found in metabolic balance studies. In contrast to the usual case of vitamin D-deficient osteomalacia, the patient resistant to the vitamin has fecal calcium and phosphorus contents which are not decreased following the

usual doses of 500 to 1,000 units given daily. It has been observed that some patients with vitamin D resistance require 500,000 to 1,000,000 units daily before fecal calcium is decreased and the osteomalacia is improved. The unresponsiveness of these patients is not due to faulty absorption, as the serum concentration of the vitamin has been found to be many times normal.⁸

Dent⁴ is of the opinion that the osteomalacia resistant to vitamin D is due to an increase in the renal clearance of phosphate and that large doses of the vitamin correct this defect. This is in conflict with the view of Albright³ that such large doses increase rather than decrease urinary phosphorus. The answer to this provocative problem awaits more definitive study on the action of vitamin D, especially in respect to delineating its specific effect on the kidney and bone. That the main action of the vitamin is to increase intestinal absorption of calcium and phosphorus seems well established.

Osteomalacia Associated With Other Diseases

Of theoretical interest, is the observation that osteomalacia may occur with certain other disease entities. The reasons for its development in most of these conditions has not been elucidated.

Marble bone disease or osteopetrosis is a rare condition of increased bone density throughout the skeleton. This is the apparent result of continuing osteoid calcification in bone where there is little or no resorption—a state of metabolic disequilibrium. It is postulated that if the calcium salts are not liberated from bone already formed, incomplete calcification of newly-formed osteoid tissue and osteomalacia will result.⁹ This process will be accentuated if for any reason there is suboptimal absorption of calcium from the intestinal tract.

During the postoperative and healing stage of hyperparathyroidism in a patient with osteitis fibrosa generalisata, serum calcium and phosphorus concentration may fall to levels found in osteomalacia.³ Under such circumstances bone biopsies have been found to show wide osteoid seams which are poorly calcified. This osteomalacia quite obviously is only temporary, and when healing is completed, bone of increased density results.

Albright has reported that under certain conditions osteomalacia may develop during the hypoparathyroid state.²¹ His patient had hypocalcemia

with tetany and hyperphosphatemia following thyroidectomy. A diagnosis of hypoparathyroidism was apparent, but the findings of skeletal demineralization and increased alkaline phosphatase levels in serum suggested other possibilities. Bone biopsy revealed osteomalacia. Using a series of hypothetical ion products of serum calcium and phosphorus, Albright proposed that in hypoparathyroidism the product on occasion may remain below the critical point for osteoid calcification and that osteomalacia may result.

Of unknown significance is the association of osteomalacia with neurofibromatosis¹⁰ and cranio-stenosis.¹¹ In Wilson's disease, one of the major metabolic defects is an increased renal clearance of amino acids and there may also be evidence of other renal tubular dysfunctions. Pertinent to the present discussion is the study of Cooper, in which there was evidence of impaired tubular resorption of phosphorus associated with biochemical and x-ray findings of osteomalacia.¹² It is possible that the tubular damage is in some way related to the increased concentrations of copper found in kidney tissue in the disease and that certain enzyme systems necessary for specific resorptive functions are inhibited by the excess copper.

Hypophosphatasia

Of unusual interest has been the recent description of a bone disease resembling osteomalacia in which a marked deficiency of alkaline phosphatase has been found in the cartilage, liver and serum.¹³ Changes compatible with osteomalacia have been found in bone biopsies of patients with this condition, but, in contrast to the usual form of osteomalacia, the serum calcium and phosphorus may be elevated. The exact role of alkaline phosphatase in the calcification of bone is still to be determined. Gutman and Yu¹⁴ are of the opinion that this enzyme makes available inorganic phosphorus from the phosphoric esters which arise from phosphorylative glycogenolysis occurring in endochondral calcification. If so, a deficiency of alkaline phosphatase would result in an insufficient concentration of phosphate ions for proper calcification of cartilage. In the presence of such an enzyme deficiency, an increase might be expected in serum and urine of certain phosphoric esters which are the substrates for alkaline phosphatase action. This has recently been verified with the demonstration of phosphoethanolamine, a major substrate of alkaline phosphatase, in

the urine of patients with hypophosphatasia.¹⁵ A relative, if not absolute, deficiency of alkaline phosphatase might underlie some of the more resistant types of osteomalacia, both in children and in adults.

Osteomalacia of Unknown Etiology

From time to time, patients with osteomalacia are reported whose metabolic defects differ from the usual form of vitamin D-resistant osteomalacia. Inability to retain either absorbed or infused calcium was the main defect in a patient of a recent report.¹⁶ In addition, an increased renal clearance of phosphorus was demonstrated. Vitamin D in amounts up to 1,000,000 units daily failed to improve the osteomalacia, and it was postulated that a defect in the bone itself in some way prevented normal mineralization.

The account of another patient with an obscure form of osteomalacia has been published by Henneman,¹⁷ and follow-up reports on this patient subsequently have been received from the investigator.¹⁸ A significant clinical and biochemical improvement followed partial parathyroidectomy and the daily addition to her diet of 3 grams of inorganic phosphorus. These measures partially corrected the chronically low serum phosphorus, and thus favored the rate of osteoid calcification.

The patient whom we have under study presents a clinical disorder similar in many respects to those reported by Kyle¹⁶ and Henneman.¹⁷ The pertinent features are multiple true and Milkman's fractures, loss of height, hypophosphatemia, reduced tubular resorption of phosphorus with little evidence of other renal tubular dysfunction, and a failure to respond to intensive vitamin D and calcium treatment. As with the patient reported by Henneman,¹⁸ clinical improvement followed added oral phosphorus. Several such patients are now under detailed observation both in England and the United States, and the results of these studies are awaited with anticipation.

General Comments

This review of osteomalacia emphasizes the limitations of knowledge in respect to calcium and phosphorus metabolism. The departures from normal of serum calcium and phosphorus levels in various disease states are well known, but the mechanisms of these alterations are not always clear. In consideration of such changes, the

absorption of calcium and phosphorus through the intestinal wall, the renal control of these ions, and, in the intact subject, the interactions of vitamin D and parathormone have to be considered. There is still controversy about the action of the latter, as both a phosphorus-diuretic effect and a calcium-mobilizing action on the bones have been described. There is no question that vitamin D increases the intestinal absorption of calcium and phosphorus, but its action on the kidney and on bone itself is less certain. Complicating the attempts to define the biochemical pathways of vitamin D action is the tendency of the sterol to elevate serum calcium in the intact subject. This response automatically inhibits parathyroid function and this interaction becomes the apparent effect of vitamin D itself. It is obvious, then, that the pharmacologic properties of vitamin D are best studied on parathyroid-deprived animals or man.

In the several reported studies of the more resistant forms of osteomalacia the low serum phosphorus has been the cause of much speculation. Albright³ has suggested that a secondary hyperparathyroidism is responsible. Dent⁴ would rather reject this thesis, and proposes the idea that the low serum phosphorus is brought about by a primary increase in the renal clearance of phosphorus. It now appears that a precise and universally acceptable explanation for the low serum inorganic phosphorus is an important key to the successful management of the patient with resistant osteomalacia. Even after large amounts of both vitamin D, in the order of 1,000,000 units daily, and added phosphate salts, the fasting level of serum inorganic phosphorus may remain abnormally low.¹⁶ After such therapy we have observed a marked increase in urinary phosphorus, indicating no significant defect in phosphorus absorption. For some reason, the serum phosphorus is either unable to return to normal values or it approaches these only briefly after phosphate ingestion. It is possible but unlikely that certain tissues, such as liver and muscle, have an increased avidity for inorganic phosphorus, which action keeps the serum value abnormally low. Studies with radioactive phosphorus in these patients might be helpful in tracing the metabolic pathways of the absorbed phosphorus. We have considered as also possible a defect in the serum phospholipids such that this fraction is expanded at the expense of the serum inorganic phosphorus.

Indeed, an elevated phospholipid value has been found in the patient now under our study, but the significance of this is not yet known.

Since large doses of vitamin D and added supplements of oral phosphorus given to patients with resistant osteomalacia have not raised the fasting level of serum inorganic phosphorus, other approaches should be considered. One of the most certain ways to achieve hyperphosphatemia is to remove the parathyroids. Loss of the presumably hyperplastic glands would be a relatively small price to pay for potential improvement in a patient immobilized with resistant osteomalacia. It is unlikely that the low serum calcium following such surgery would be more difficult to control than the preoperative hypophosphatemia. It is known that patients with hypoparathyroidism may have dense bones, a desirable development if this could be induced in a patient with resistant osteomalacia. As mentioned previously, Henneman's patient was noted to have an increased serum phosphorus as well as clinical improvement after partial parathyroidectomy and added dietary phosphorus.¹⁸

Another approach to the treatment of these patients is the use of sterol preparations other than vitamin D-2, which in the past has been used almost exclusively in the therapy of osteomalacia. In general, the few investigators who have explored these avenues believed there was no significant difference between the actions of vitamin D-2 and vitamin D-3. However, recent work indicates that patients inadvertently deprived of parathyroids during thyroid surgery and resistant to vitamin D-2, will show a significant improvement after vitamin D-3.¹⁹ The comparative properties of the several vitamin D preparations probably should be determined in a variety of metabolic bone diseases, including resistant osteomalacia.

Dent, in a recent publication, has again emphasized that osteomalacia in its many forms is sometimes genetically determined and, with this knowledge, more such patients should be uncovered for critical study.²⁰

Summary

A classification of osteomalacia has been given which takes into consideration recent additions to our knowledge of the disease. Emphasis has been placed on the more resistant forms. We have

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Economic Aspects of Fungus "Contaminants"

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THE MEDICAL profession has become fairly well acquainted with the pathogenic fungi. Terms such as actinomycosis, blastomycosis, coccidiomycosis, geotrichosis, histoplasmosis, and torulosis are well known. However, since the antibiotics have had their heyday and bacteriology and mycology are being used for diagnosis once again, doctors are receiving reports listing the names of fungi with which they are not familiar. These fungi are usually designated as "saprophytes" or "contaminants." Although the majority do not produce any disease in man, they are of great economic interest and importance. Their effects upon man are widespread and have been so for many centuries.

There are approximately 50,000 known species of fungi¹ and many more have yet to be classified. They range in size from the large toadstools and puff balls to the microscopic forms. All fungi, regardless of size, are entirely lacking in chlorophyll and must maintain life by one of two methods. The saprophytes, or decay type of fungi, grow on dead plant or animal material. The parasites require living plant or animal material for growth and produce disease.

The effect of fungi was mentioned in both unfavorable and favorable commentaries prior to the birth of Christ. In 100 A.D. Pliny claimed that the greatest pest of crops was wheat rust.¹ At the same time, Pliny, Cicero, Porphyrius, and Plutarch described truffles as one of nature's most wonderful creations²; they believed that truffles stimulated love.

The fungus responsible for wheat rust continued its destruction of crops from Pliny's age down through the centuries. In the late 1300's when John of Gaunt owned half of Britain,³ the wheat rust was causing enough damage to be mentioned in the writings of Chaucer. The United States suffered the loss of 300 million bushels of wheat from the same fungus in 1916. Man now combats

the wheat rust by raising fungus-resistant varieties of wheat.

In 1845 the August 23rd and September 13 issues of the *Gardners' Chronicle and Agricultural Gazette of England* mentioned the Irish potato blight occurring in both Europe and Ireland.¹ The fungus destroyed the entire potato crop within seven days. At that time, 10,000 lives were lost and millions suffered from misery and privation. Between 1845 and 1851 almost a million people died in this famine in Ireland alone, where potatoes constituted one of the staples. As a direct result of the famine, there was an immigration of one to two million Irish to the United States.

A similar fungus affected the grape vines of France in 1882 and threatened to wipe out the entire grape crop. At that time a learned mycologist, Pierre Millardet, worked out the now famous Bordeaux mixture of copper sulfate and lime, which is still used by the grape industry.¹

A number of fungi cause the decay of leaves, branches, and tree trunks.⁴ Unfortunately the same fungi fail to differentiate between dead timber and railroad ties, telephone poles and timbers supporting houses. The cost of such damage has run into billions of dollars. Wood rot was the biggest problems with which the British navy had to contend from the time of Henry VIII to 1860 when they switched to iron-clad ships.¹ About the time of the American Revolution, wood rot caused more destruction to British ships than the combined attacks of all other navies.

Many ancient and valuable documents have been lost to the world through their destruction by fungi. Fortunately, the old Spaniards were able to prevent the fungi from attacking many of their old records, making available to us some of our most fascinating stories of the sea, the Caribbean area and pirate days. By working directly from Columbus' old logs, a Dutch sea captain was able to establish that Columbus made his original

landing on Caicos Island rather than Watling Island, as has been assumed for many years due to calculations made from faulty translations of the logs.⁵ An event of less historical importance, but one which affords some satirical amusement, is preserved in the Jamaica museum.⁶ When an American privateer was accused of smuggling by the British in the War of 1812, he threw his incriminating log book overboard. The log was swallowed by a shark, which was caught by the crew of the British man-of-war bringing the smuggling charges against the privateer. The old document states that he was convicted on the evidence found within the shark.

For centuries certain types of fungi have been known to produce psychotic aberrations. The devil plant of Mexico is a fungus which causes visual hallucinations in the form of objects appearing in various colors. A closely related fungus which produced "berserk men" has been found by European scholars.⁷ The word "berzerk" means bear skin and is derived from early Norsemen who ate the fungus and became markedly psychotic.⁸ These tribesmen knew the effects of the fungus and staged orgies, during which they ate the fungus or drank the urine of those who had eaten the fungus, realizing that the alkaloid was excreted in the urine in an unadulterated state. When under the influence of this fungus, the men fought with the fury of beasts, had twice the strength of normal men, and apparently felt no pain. They killed without regard to identity, and as often as not they slaughtered each other. These effects lasted for hours; but when they wore off, the men were left in a weakened condition and they were often destroyed by their enemies.

During World War II, 50 per cent of the articles sent to the South Pacific or other tropical areas were rendered unusable by fungi. The problem was serious enough to warrant the formation of the Tropical Deterioration Laboratory of the Quartermaster Corps.⁹ Data was collected and studies were made on the effects of fungi on such varied materials as cloth, wood, paper, bakelite, waterproofing, roofing tar, paint, insulation on wire, photographic emulsion, glass, and optical equipment.

In the Middle Ages ergotism was a disease which produced gangrene, abortion and death. Today the active principle in ergot which once caused disability and death is used to produce a drug valuable in obstetrics.¹

The story of the antibiotics is well known.¹⁰ However, it is less commonly known that weight for weight, the value of many of the commonly used antibiotics exceeds that of gold. One gram (four 250 mg. capsules) costs approximately \$2.00 or about \$60.00 per ounce. The current market price of gold is \$35.00 per ounce.

In addition to their value in the production of antibiotics, fungi can be used to produce vitamins, fat, and protein supplements.¹¹ In the future they may become an important factor in food production, especially in such over-populated countries as China, Japan, and India, where diet is limited and low in protein. Although this is a relatively new concept as far as homo sapiens is concerned, many of the highly developed social insects, such as ants and termites, have been cultivating fungi for use as food for untold centuries.⁴

A number of economically important fungi are listed alphabetically, with no relation to their classification. Information on their classification may be found in a number of books: Dodge's "Medical Mycology"¹²; Bessey's "Morphology and Taxonomy of Fungi"¹³; Beneke's "Medical Mycology: Laboratory Manual"¹⁴; Conant's "Manual of Clinical Mycology"¹⁵; Barnett's "Imperfect Fungi."¹⁶ Many of the fungi listed are ones commonly reported by clinical laboratories and are primarily plant pathogens which are capable of producing allergies or similar diseases in man.¹⁷

Actinomyces contains numerous organisms, of which thirty-four species have been classified. The organisms may be called *Actinomyces* or *Nocardia* and are pathogenic for plants, animals and man. It is responsible for potato scab, which is world wide in distribution and is one of the most important and least satisfactorily controlled potato diseases.^{18,19}

Actinomyces bovis is pathogenic for both man and animals;¹⁵ it produces draining sinuses of the jaw, chest or abdomen. The organisms may also attack the bone, lung, intestine, and lymphoid tissue.

Alternaria is a plant pathogen primarily causing leaf spot disease in potatoes and tomatoes. Brown to black leathery spots appear on the leaves of the affected plants. Tomato fruits are affected in the green or ripe stage. The fungus also attacks violets, muskmelon, oranges, carrots, carnations, apples, grapes, figs and olives. Since *Alternaria* spores have a very slow rate of fall, they are widely distributed in nature.^{18,19}

In man *Alternaria* produces respiratory allergy and is responsible for asthma.

Alternaria has the singular distinction of being the first fungus recovered from solutions of radioactive isotopes.²⁰ It was recovered from a solution which could not be standardized and was found to be actually taking up the radioactivity. *Alternaria* is responsible also for the sterilization of isotope solutions. Until it was found as a contaminant, isotopes were considered to be self-sterilizing.

Aspergillus is a large group which can produce disease in both plants and man and which is of commercial importance. It is often responsible for the spoilage of stored seeds and attacks on onions and figs.^{18,19} In man the organisms cause an allergy or pneumonia. In addition, they can attack the eye or ear.

Commercially, *Aspergilli* are used in the production of gallic acid, citric acid, gluconic acid, oxalic acid and itaconic acid.²¹

Since before 1800 B.C. *Aspergilli* have been used to produce sugars from starches, cereals, grains, potatoes, etc.⁴ The Japanese use it to make saki, which is a rice wine made with the aid of the fungus. The fungus converts the rice into sugars, which are then fermented with yeast. The manufacture of this wine has been a household art in Japan for centuries. About 200 years before the time of Pasteur, they were heating the finished product to prevent spoilage—the Japanese pasteurized their wine two centuries before Pasteur developed the process to preserve French wines from spoilage.

Captured allied troops in World War II took advantage of their knowledge of the *Aspergilli* by using it to convert part of their rice ration into sugar, which they fermented with yeast.^{1,26} In this manner, they obtained enough vitamin B to prevent beriberi.

Cephalosporium, found in soils throughout the world, produces black bundle disease in corn.^{18,19} As far as is known, it has no effect on animals or man. *Cephalosporium* may be mistaken microscopically for *Sporotrichum*, which is pathogenic for both animals and man.

Fusarium has 1500 species, which are world wide in their distribution. In a large variety of plants it produces vascular wilts, the economic implications of which are tremendous. Some of the plants it attacks are flax, cotton, watermelons, cabbage, bananas, celery, tea, peanuts, muskmelons, asters, beans, stock, and cactus.^{18,19}

In man *Fusarium* causes a respiratory allergy.

Fusarium was the first fungus to record itself by inherent radioactivity from metabolized I.^{131,22}

Gliocladium is a common laboratory contaminant which microscopically resembles *Penicillium*.^{18,19} It is a saprophyte, as well as a mild plant parasite. During World War II, *Gliocladium* caused fabric decay in military equipment.⁹ It has no effect on any animals.

Gliocladium is closely related to the molds used in the production of steroids.²⁷

Helminthosporium is a plant pathogen consisting of approximately 250 species. It attacks tree seedlings and basic crops, such as barley, oats, and onions.^{18,19} In man the organism affects the lung and produces an allergy.

Helminthosporium is an example of one fungus being able to control another. There is a fungus, *Chaetonia*, which is common to the soil and which lives largely on decaying plant material, although it often invades the cellulose fibers of fabrics. Recently a strain which inhibited the growth of *Helminthosporium* was found in seeds. When the soil around oak seedlings was inoculated with *Helminthosporium* in an experiment, most of the seedlings were killed; those which survived were diseased. However, when the soil was inoculated with both *Helminthosporium* and *Chaetonia*, the *Helminthosporium* did no harm to the seedlings. Apparently the *Chaetonia* did not invade the other fungus, but produced a chemical which diffused around it to either kill the organism or to inhibit its growth.⁴

Hormodendrum produces spots on barley stems and leaves, often reducing the yield.^{18,19} It is common in both the soil and the air. In man and animals it causes allergy and attacks the lung. *H. pedrosoi* and *H. compactum* are responsible for Madura foot.¹⁵

Monilia is a genus comprised of forty species, some of which are pathogenic for plants. It attacks the epidermoid layer of peaches, cherries, plums and stone fruit to produce mummified fruits.^{18,19} The only species pathogenic for man is *Monilia* (*Candida*) *albicans*. It can affect the skin, mucous membranes, intestinal tract or respiratory tract.

Mucor consists mainly of saprophytes, but there are a few species which produce decay in ripe fruit, tubers, pumpkins, and okra.^{18,19} It can also cause blights in blossoms.

In man, *Mucor* causes allergy and has been isolated from the lung, the respiratory tract, the

brain, and diabetic limbs with vascular thrombosis.²³ The organism can be seen in tissue.

Mucor is host to a parasitic fungus which was considered rare until 1930. Since then it has been found as a parasite on *Phycomycetes* isolated from animal intestines.⁵ This would appear to be the mycological version of the old biological jingle that big fleas have smaller fleas, smaller fleas have lesser fleas, etc., upon their backs to bite them.

Nigrospora is one of the mildews, whose jet black spores produce stains on paper and cloth. It also causes a disease in corn.^{18,19} It has no effect on man or animals.

Oospora consists of forty-four species and attacks hops, clover, cucumbers, chrysanthemums, tobacco and oaks.^{18,19} When present in cottage cheese, it affects the flavor.²¹ *Oospora* has been isolated from skin lesions in crocodiles. The pathogenic form in man, *Geotrichum*, affects the respiratory tracts and the gastro-intestinal tract.

Paecilomyces is a saprophyte having conidiophores which resemble those of *Penicillium*.^{18,19} Dodge reports using it to experimentally produce a granuloma or tumor.¹²

Penicillium has many species, some of which can affect both plants and man. It produces fruit rot in oranges and other citrus fruits.^{18,19} In man it can attack the lungs, bladder, kidneys, ear and nails.

Fleming used *Penicillium notatum* to produce penicillin, the first antibiotic. In 1954, the production of penicillin was 860,000 pounds, valued at \$63,000,000.²¹

The green color in roquefort cheese is due to *Penicillium*, and species of *Penicillium* are used in the manufacture of other cheeses.

Phialophora is a saprophyte which attacks the skin in man to produce chromomycosis.

Phoma consists of 1600 species. It was first reported in Germany in 1791 and in the United States in 1910. It is especially destructive to cabbage, but it may also produce wilt in broccoli, Brussels sprouts, turnips, beets, pears, tomatoes, apples, hops, fir trees and grapes.^{18,19} In man, it causes a respiratory allergy.

Rhizopus, best known as the common bread mold, is far more important as a plant pathogen. It enters plants through wounds and causes the protoplasm in adjacent cells to shrink, producing soft rot in sweet potatoes, Irish potatoes, beans, apples, pears, tomatoes, peaches, plums, raspberries, quince, strawberries and currants.^{18,19}

In man, *Rhizopus* attacks the lungs and produces an allergy.²³

Species of this fungus are being used commercially to produce tons of the steroid intermediates, which eventually are marketed as cortisone and allied drugs.²⁷

Rhodotorula, which is similar to *Candida* except for its red pigment, produces pineapple and sugar cane rot by oxidation of sugars.^{18,19} In the laboratory *Rhodotorula* may be confused by its gross appearance on culture media with a chromogenic bacterium, *Serratia marcescens*, which was associated with miracles in the Middle Ages.^{24,25} It was found on bread in areas of France and was believed to be Christ's blood.

Scopulariopsis is a saprophyte which thrives in high nitrogenous dead material, such as cured meat, bone, wool, leather, and ripening cheese.^{18,19} In man, it attacks the skin under the nails to produce onychomycosis. Both spores and hyphae are seen in the tissue.

Scopulariopsis is peculiar in that it attacks material containing arsenic.²¹ Arsenic is often used in paint to produce a green color, particularly in the war, moist climates where fungi are abundant. As the fungus attacks the paint, the arsenic is released as a gas which produces symptoms of arsenic intoxication when inhaled.

Streptomyces is a plant pathogen which causes potato scab in Irish potatoes and soil rot in sweet potatoes.^{18,19}

This group has produced many of the antibiotics, some of which are chloramphenicol, chlorotetracycline, oxytetracycline, and erythromycin. The total production of broad spectrum antibiotics in 1955 was 450,000 pounds and its wholesale value was \$195,000,000. These figures leave no doubt as to the commercial importance of this laboratory contaminant.

Syncephalastrum is parasitic on other molds, as well as being saprophytic on plant and animal remains.^{18,19} It has no known effect on living man or animals.

Trichoderma produces storage rot in sweet potatoes. It is common in any decaying material and is used as an antagonist to control some fungi which are plant pathogens. It has no effect on man or animals.^{18,19}

Verticillium produces a vascular disease called the "wilt" in okra, potatoes, egg plant, cotton, black raspberries, snap dragons, and dahlias.^{18,19} It has no known effect on man.

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OSTEOMALACIA

(Continued from Page 1553)

alluded to some of the underlying mechanisms and have pointed out the gaps in our understanding of pathogenesis. The significance of the low serum inorganic phosphorus in treatment-resistant osteomalacia has been discussed, and possible new approaches to treatment have been suggested.

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A Comparative Study of the Clinical Effectiveness of Dicumarol and Hedulin

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DICUMAROL® is an anticoagulant of proven merit, high tolerance, and relative safety.¹ It has two major faults: delay in onset of activity, and persistence of effect after termination of therapy. Hedulin® is a newer anticoagulant, chemically related to the indandione group, reported to be as effective as Dicumarol and superior to it with respect to these two drawbacks.^{2,3} The following report describes a comparative study of the clinical effectiveness of these two drugs in a large general hospital.

Material and Methods

A section of the medical service consisting of eight six-bed wards was used for this study, and all patients requiring anticoagulant therapy were included.²⁻⁴ Patients in the even-numbered wards received Hedulin, those in the odd-numbered wards, Dicumarol. Pertinent clinical data are summarized in Table I.

Dosage of medication was controlled by daily prothrombin concentration determinations according to the Quick one-stage method. These determinations were reported as per cent of normal, and those patients with prothrombin concentrations between 10 per cent and 30 per cent of normal were considered under effective control.⁵ The same physician was responsible for ordering medication throughout the course of any one case. When possible, prothrombin determinations were obtained for several days after termination of therapy to determine the rate at which the prothrombin concentration returned to normal. Prothrombin concentrations of 70 per cent or higher were considered to be within the normal range. Each patient included was studied with reference to the following points: (a) Total number of days during which the patient was on anticoagulant therapy; (b) days required to establish adequate anticoagulant effect; (c) days under effective therapy;

(d) days out of control after effective levels had been reached, that is, the number of days when the prothrombin concentration was higher than 30 per cent; (e) days to return to normal prothrombin concentrations after termination of therapy; and (f) percentage of total time, after effective control, that the prothrombin determinations were above or below effective levels. This figure was derived from the following formula:

$$\frac{\text{Days out of Control}}{\text{Total Days minus Days to Control}} \times 100$$

The results of our study are summarized in Table II and indicate that in our hands Hedulin was almost twice as effective as Dicumarol in maintaining an effective reduction in prothrombin concentration: with Dicumarol, the patient's prothrombin concentration was not at therapeutic levels 25.4 per cent of the time, while with Hedulin, the period of ineffective therapy was 13.9 per cent. Hedulin also produced a more rapid reduction in prothrombin concentration when therapy was initiated, and permitted a more rapid return to normal when therapy was discontinued.

Failure to maintain adequate reduction in prothrombin concentration on an average of one out of every four days of therapy may seem high, and it impressed us as being unduly so. However, there are certain difficulties inherent in translating carefully controlled studies in research hospitals, where standardized procedures are the rule, into techniques applicable in large busy general hospitals lacking such rigid standardization. With this in mind, we believe that the superiority of Hedulin demonstrated in our study is of great practical importance. Twelve of the eighty-eight patients receiving Hedulin were under effective control during their entire course of therapy. Each of the Dicumarol-treated patients was out of effective control on at least one day. Furthermore, once effective levels had been reached, the dosage schedule of Hedulin was surprisingly constant, often

From the Medical Service of Mt. Carmel Mercy Hospital, Detroit, Michigan, H. L. Smith, M.D., Chief of Service.

TABLE I. CLINICAL DATA

	Dicumarol	Hedulin
Number of Patients:	54	108
Male	40	66
Female	14	42
Age:		
Range	40-85	40-82
Average	57	66
Indications for Treatment:		
Thrombophlebitis	9	3
Myocardial Infarction	44	101
Thrombosis (cerebral or peripheral arteries.)	1	4

for a week or more. The present practice of obtaining daily prothrombin concentration determinations is a reflection of the difficulty encountered in the administration of Dicumarol. Once effective control has been achieved with Hedulin, subsequent dosage is quite predictable, and prothrombin determinations at intervals of three or four days would be adequate in most cases. Because of this constancy of dosage, we feel that Hedulin will lend itself well to the management of ambulatory patients requiring anticoagulant therapy. We are now engaged in following a group of such patients using weekly prothrombin concentration determination. Because of the three-to-four-day lag in achieving effective depression of prothrombin concentrations using either drug, we feel that the routine initial use of Heparin is advisable in patients who require anticoagulant therapy.⁶

We encountered no serious toxic or hemorrhagic complications with either drug. A red discoloration of the urine may be produced by Hedulin and should not be confused with hematuria.

Summary

1. 162 patients, representing 2,786 anticoagulant days were treated with Dicumarol or Hedulin.

2. Patients receiving Dicumarol were found to require an average of four days to achieve effective reduction of prothrombin concentrations. Subsequent control was difficult, and the prothrombin concentrations were out of the effective range 25.4 per cent of the time. Recovery of prothrombin concentration to normal occurred in an average of four days following termination of therapy.

3. Patients receiving Hedulin were found to

TABLE II. RESULTS OF CLINICAL STUDY WITH DICUMAROL AND HEDULIN

	Dicumarol	Hedulin
Total number of days on anticoagulants	1,420	1,366
Days required to achieve effective suppression of Prothrombin concentration (average)	4	3
Days required to regain normal prothrombin concentration levels after termination of therapy (average)	3	2
Percentage of time, after achieving effective suppression of prothrombin concentration that such suppression was not maintained	25.4%	13.9%

require an average of three days to achieve effective reduction of prothrombin concentrations. Subsequent control was easier than with Dicumarol, and the prothrombin concentrations of these patients were out of effective range only 13.4 per cent of the time. Recovery of the prothrombin concentration to normal occurred within three days following termination of therapy.

4. In our hands, Hedulin was superior to Dicumarol with regard to time of activity, ease of maintaining effective prothrombin concentration, and rapidity of restoration of prothrombin concentration following treatment. It appears to be a more practical anticoagulant for use in ambulant as well as hospitalized patients.

Acknowledgment

We wish to thank Miss J. Walker for her help in preparing this paper, and to extend our appreciation to Dr. Hugh Kerrin and to Dr. Julian Guidot for the use of some of their case statistics, as well as to Dr. I. D. Fagin for his advice and assistance.

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Non-cyclic bleeding from any body orifice, an irritative cough, a minor change in bowel habit, or vague indigestion in middle life should always call for careful questioning and investigation.

The inclusion of a rectal, vaginal, and breast examination in all persons over thirty-five years of age is undoubtedly more important than looking in their mouths and taking their blood pressure.

Myocardial Infarction in an Industrial City

By R. J. Bareis, M.D., P. E. Schroeder, M.D.
and G. E. Drewyer, M.D., F.A.C.P.
Flint, Michigan

A REVIEW of the patient charts with the diagnosis of acute myocardial infarction was made for the year 1954 in the three medical hospitals (Hurley, St. Joseph, and McLaren) that serve Flint, Michigan, a busy industrial city of 250,000 population. Only those patients were included who had autopsy confirmation or unequivocal electrocardiographic changes and who had the onset of symptoms referable to the infarction within two weeks prior to admission. No set plan of treatment was followed. Each patient was treated according to his individual needs by his private physician. Using the above criteria in selecting cases, a total of 254 cases of infarction was compiled and studied.

Incidence

It has been the impression of local physicians that the incidence of infarction is greater in Flint than in other communities of comparable size. This observation has been attributed to the employment of a large share of the local laboring force by the automotive industry where the competitive demands on executive and laborer alike are great. The Flint Department of Health listed 410 cases for the year 1954, but it is impossible to determine with accuracy the exact number of infarctions that do occur in a city. Our total of 254 cases did not include patients treated in osteopathic hospitals or at home, or patients dead on arrival at hospitals without autopsy proof of cause of death. In Flint, most recognized cases are hospitalized (the prevalent use of hospitalization insurance is partially responsible for this). The ratio of one infarction to 194 hospital admissions in one of the hospitals (Hurley) compares favorably with a similar ratio of 1:205 found in Dallas, Texas.¹ Variable factors, including the local professional philosophy concerning hospital versus home care, availability of hospital facilities, and

From the Department of Internal Medicine, Hurley Hospital, Flint, Michigan. Dr. Bareis and Dr. Schroeder are residents in Internal Medicine; Dr. Drewyer is Head, Department of Internal Medicine.

patient ability to pay for hospital care, would invalidate comparisons of the incidence in one community with that in another.

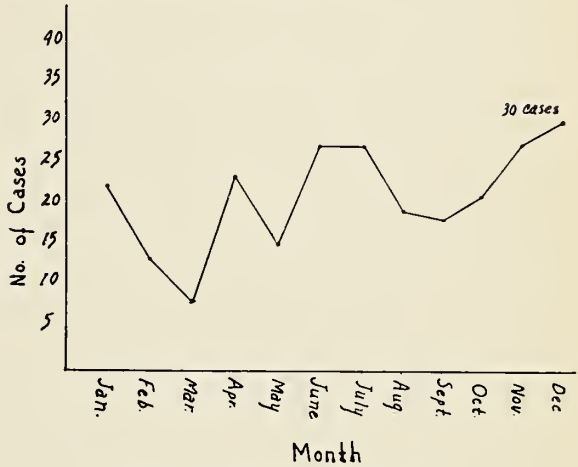


Fig. 1. Seasonal distribution.

Race

Negroes constitute 6 to 8 per cent of the Flint census and approximately 20 per cent of patients at Hurley Hospital. Despite the comparable admission rate for Negroes, only four, or 1.6 per cent, of the 254 cases were Negro patients. This finding would support the impression that this disease is less common in the Negro race.^{2,5} The reason for this apparent difference in incidence of myocardial infarction is as yet unexplained.

Sex

There were 196 men and fifty-eight women in our study, for a ratio of 3.4:1. Various authors report ratios from 1:1 to 8:1. The Henry Ford Hospital study on 920 patients showed a ratio of 4.4:1.⁴ More recently, Lee and Thomas⁵ report an increasing frequency in elderly women, with a reduction of the ratio to 1.2:1.

Seasonal Incidence

Some writers claim a higher incidence in the winter months, but most feel that there is a fairly even distribution throughout the year.^{10,2,6} Teng

TABLE I. OCCUPATION

Occupation	Number of Patients	Per Cent of Total
Skilled and unskilled workers	95	50%
Supervisory or executive	24	13%
Retired	30	16%
Housewives	30	16%
Unemployed	9	5%

and Heyer¹ in Dallas, Texas, report a higher incidence in the summer months, while Smith et al⁴ in Detroit found an even distribution with a slight increase in November. June, July, November and December were the peak months in our study (Fig. 1). It can only be a matter of speculation as to the role that the extremes and sudden changes in weather and concomitant activity (such as shoveling snow) assume in producing these peaks.

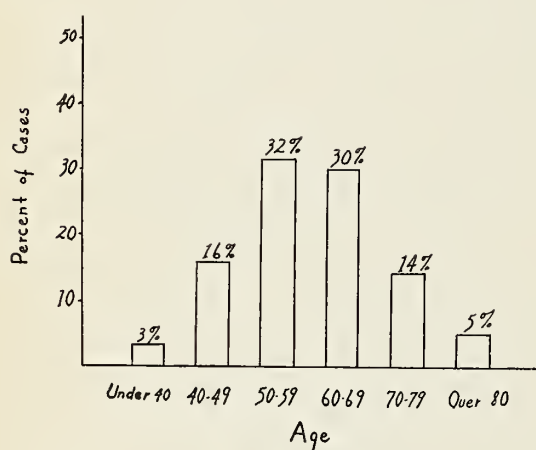


Fig. 2. Age distribution.

Occupation

Occupational data was available on 188 patients.

There is inconclusive evidence that an etiologic relationship between type of occupation and occurrence of coronary thrombosis exists. Yater² found that individuals engaged in less physically difficult occupations than control groups had a higher prevalence of infarction. Of those employed in the city's industry (119 patients), twenty-four, or 20 per cent, were in the supervisory or executive category. This percentage parallels the actual prevalence of this group in the city's industry, about 18 per cent. There was no occupational preponderance in our series of cases.

Age Distribution

Some authors have found infarction to be most common in the fifth decade;^{7,8} McDonald and

TABLE II. AGE DISTRIBUTION

	Total	Male		Female	
		Number	Per Cent	Number	Per Cent
Patients under age 50	49	48	98	1	2
Patients over age 50	205	148	71	57	29

TABLE III. LOCATION OF INFARCTION

	Number	Per Cent	Per Cent Mortality
Anterior	143	56	34
Posterior	111	44	21

others have found the highest peak to be in the sixth decade.^{9,10} Sixty-two per cent of our patients were between the ages of fifty and seventy years (Fig. 2). Three per cent were less than forty years of age, a finding agreeing with that of Friedburg.⁷ The ratio of males to females tended to equalize in the older age groups. The only premenopausal patient among the fifty-eight females was a forty-two-year-old woman with diabetes. It is a well-recognized clinical finding that myocardial infarction rarely is found in premenopausal women in the absence of hypertension or diabetes.

Location of Infarction

Most writers seem to agree that an anterior infarction is slightly more common than a posterior; however, there is no agreement concerning the effect of the location of the infarction on the mortality rate.^{4,9,14} Most feel that there is no difference, but a few feel that an anterior infarct has a poorer prognosis. Mintz and Katz¹⁰ find the posterior infarct to have the least favorable outlook. Our study indicated a slight prevalence of the anterior location with a somewhat increased mortality rate.

Leukocyte Count

Mortality rates have been said to rise in proportion to the elevation in the white cell count.^{4,15} Twenty-four of the sixty-five patients with a leukocyte count over 15,000 expired, or 37 per cent compared with the over-all mortality of 26 per cent. On the other hand, several patients had counts of less than 10,000. Generally we feel the leukocyte count is of no prognostic value unless persistently elevated during the hospital course.

Erythrocyte sedimentation rates, C-reactive pro-

TABLE IV. LEUKOCYTE COUNT

Leukocyte Count	Number of Patients	Per Cent of Total
Of the 230 counts recorded on admission:		
Less than 10,000	68	30%
10,000-15,000	97	42%
Greater than 15,000	65	28%
Of the 45 counts recorded among the 66 deaths:		
Less than 15,000	21	47%
More than 15,000	24	53%

tein, and cholesterol values were obtained too infrequently to be statistically informative.

Associated Disease

Angina Pectoris.—Of the 254 reported cases, 135, or 53 per cent, gave a history of angina pectoris. Not included in this total were cases where anginal pain heralded the onset of the infarction, i.e., only past history of angina was included. This percentage did not vary appreciably with age or sex and did not have any effect on prognosis. Smith and his group⁴ reported an incidence of approximately 50 per cent, whereas Mintz and Katz¹⁰ found a higher incidence of 72 per cent. Neither author discovered a sex variation or effect on mortality.

Hypertension.—Hypertension is very frequently associated with coronary occlusion, varying incidences of 30 to 80 per cent having been reported. Mintz and Katz reported 36 per cent;¹⁰ Master found 62.4 per cent.⁸ We found sixty-four cases, or 25 per cent, where hypertension was definitely associated. Not included were patients who gave an unreliable history or whose blood pressure elevation was borderline or elevated on only one occasion. Therefore, our figure of 25 per cent is undoubtedly lower than the actual incidence in this group of patients. Hypertension was more prevalent in women (twenty-nine cases, or 50 per cent) than in men (thirty-five cases, or 18 per cent). This finding is in agreement with previous reports.^{8,10} The mortality rate among these sixty-four patients was twenty-one, or 33 per cent, as compared to the over-all mortality of 26 per cent. Most authorities deny an increased death rate in this group.

Diabetes Mellitus.—Twenty-five cases, or 10 per cent, had diabetes mellitus, which agrees with the 10 to 25 per cent found in the literature.^{4,8,10} In view of the degenerative vascular changes associated with diabetes, it is not surprising that this

percentage is far above the estimated 1.2 per cent of the total population that have diabetes or the 4 per cent morbidity in the infarction age range. Some 10 to 30 per cent of diabetic patients have findings of acute coronary occlusion at autopsy.¹¹ Ten, or 40 per cent, of our patients with diabetes died. Most, but not all, writers feel the mortality with myocardial infarction to be greater in the diabetic.

Obesity.—Of a total of 171 patients whose height and weight were available, seventy-five, or 44 per cent, were overweight, while ninety-six, or 56 per cent, were average or underweight. Using the Metropolitan Life Insurance tables, we classified as obese all those who weighed ten pounds or more than the maximum weight listed for a large-framed person of any certain height. Since it has been estimated that 20 per cent of adults in the United States are overweight, our incidence of 44 per cent would seem to be significant. This finding cannot be attributed to the increased number of people in the older age group in our series, since thirty-five, or 42 per cent, of those obese persons were men less than sixty years old. Of twelve women less than sixty years old, six, or 50 per cent, were overweight.

Obesity is frequently mentioned as a predisposing factor for myocardial infarction. Yater,² however, found only a slight tendency for men with coronary disease to be overweight, while women tended to be obese more frequently. One author found obesity to be present in 23 per cent of cases;¹³ another in 33 per cent of cases.⁴ Just how obesity predisposes toward coronary occlusion (if it does) is as yet unknown. The role of cholesterol, fat, caloric consumption, and lack of physical exercise in the development of the arteriosclerotic process has not been ascertained to date. We know that a person of any constitutional habitus and weight may develop an infarction. However, we tend to agree with Arnott²² when he says: "How much nicer it is when being stricken with coronary thrombosis to be told that it is all due to hard work, laudable ambition, and selfless devotion to duty than to be told it is due to gluttony and physical indolence!"

Other Diseases.—The incidence of gall-bladder disease and peptic ulcer was about 7 per cent for each disease which approximates the findings in the general population. Friedburg⁷ suggests a rela-

tionship between gall-bladder disease and coronary artery disease while Breyfogle¹² emphasizes the higher frequency of coexisting myocardial and gall-bladder disease.

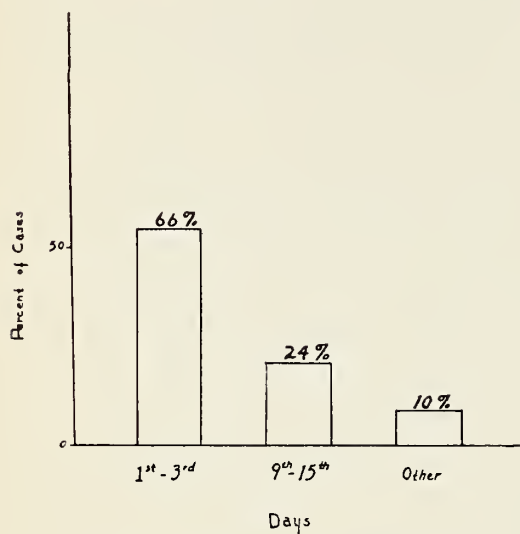


Fig. 3. Mortality-time distribution.

Mortality

Of the 254 patients, sixty-six, or 26 per cent, died. Of these, forty-four were men, or 22 per cent of the men in the study, and twenty-two were women, or 38 per cent of the women in the series. The mortality rate was almost twice as great in the group over sixty years of age where forty-one, or 33.5 per cent, of those in this age group expired. Only twenty-five, or 19 per cent, of those less than sixty years died. Patients with two or more infarctions had a higher mortality rate, 33 per cent in our series, compared to 24 per cent in those with their first infarction.

Over-all mortality rates are reported as being somewhere between 15 and 50 per cent, most being between 20 to 30 per cent.^{6,16,17,18} Schnur^{19,21} in a review of cases over a ten-year period emphasizes the fact that past and present associated illnesses, complications, and age of the patient determine the prognosis of any individual. He termed this the Pathological Index rating. Granted that the competency of medical staffs may vary from place to place, these factors of variable Pathological Indices, different age and racial groups, and dissimilar socioeconomic backgrounds makes comparison of mortality rates in different communities untenable.

TABLE V. CAUSE OF DEATH AFTER THIRD DAY

Cause	Number	Dicumarol Given	
		Yes	No
Cerebral infarction	1		1
Pulmonary infarction	2		2
Ruptured septum	1		1
Ruptured ventricle	2	1	1
Coronary failure		1	
Congestive failure	9	3	6
Cause not given or known	7	6	1

It is well known that the mortality rate from coronary occlusion increases with age.¹⁶ Woods and Barnes²⁰ found the mortality to be twice as great beyond the age of sixty as below. The rate is also higher in patients who have a history of previous infarctions. In the Henry Ford Hospital, the study over-all mortality was 21 per cent, compared with 33 per cent among those with past infarction.⁴ These figures approximate ours. The greater mortality among women in our study is probably explained by the increased average age of the female patients (Table II).

Of the fatal cases, 66 per cent expired within the first seventy-two hours of admission (Fig. 3). Another 24 per cent expired from the ninth to fifteenth day. This is the second most critical period, when the area of infarction within the myocardial muscle is least resistant to stress, and complications, such as cardiac rupture and thromboemboli, occur. No attempt was made to determine the exact mechanism of death in patients dying during the first three days because of inadequate documentation and low autopsy rate.

Table V shows the cause of death of twenty-three patients after the third day of hospitalization. It is difficult to determine the cause of death, although ventricular fibrillation is probably the most important, with congestive failure a close second in the immediate post-infarction period.²⁰ A report from the Mayo Clinic (which includes deaths during the first forty-eight hours) lists myocardial or congestive failure as the cause of death in 43 per cent of their 133 cases; coronary failure (persistent angina) in 23 per cent; rupture of the heart in 15 per cent; shock in 9 per cent; and thromboembolic phenomena in 6 per cent.¹⁴ In our series, congestive failure was the most frequent cause of death after the initial three-day-period.

We found it very difficult to evaluate the efficacy of anticoagulants on reducing the mortality rate and incidence of complications. Dicumarol

was used in 160 of our patients with a resulting mortality of 12 per cent. The death rate in those not given Dicumarol was forty-seven, or 50 per cent. This apparent discrepancy in mortality rate is attributed to several factors. In the first place, at least half of those in the latter group died within the first three days, before the anticoagulant could be given or before it could have had any therapeutic effect. Secondly, many patients not dicumarolized were in the elderly age group where the mortality rate with infarction is higher anyway and where the risk of using anticoagulants is probably greater than any benefit derived. Because of these and other variable factors, we concluded that a statistical analysis of Dicumarol therapy in our series was not valid.

Summary

Prompted by the impression of a higher incidence of myocardial infarction in our local industrial community, a study was made of 254 cases of proven infarction admitted to the three Flint medical hospitals in 1954. These 254 patients were analyzed according to age, sex, race and occupation. The incidence of associated disease and the effect that each disease had on the subsequent mortality was ascertained. The mortality rate was further evaluated on the basis of sex, age, and history of previous infarction. The time of death during the hospital course and probable causes of death were determined. Since these were private patients under the care of many local physicians, it was not possible to make a controlled study of the efficacy of Dicumarol or other anticoagulants. We could only speculate about the etiologic and prognostic factors influencing each individual case of infarction.

Conclusions

1. The incidence of myocardial infarction is probably higher in an industrial community than in the general population. The exact number cannot be determined accurately.
2. Myocardial infarction is more common in the male patient (3.4:1) and in the white race.
3. Myocardial infarction in the premenopausal women is rare. Only one of sixty-eight women was in this group.
4. The peak incidence months were in mid-winter and midsummer.
5. There was no occupational predisposition for myocardial infarction.

6. Patients in the sixth and seventh decades constituted 62 per cent of our series.

7. The location of the infarction and the height of the leukocyte count on admission had very little prognostic value.

8. Associated diseases of angina pectoris, hypertension, and diabetes mellitus had no appreciable effect on the mortality rate. Hypertension was less prevalent than in previously reported series.

9. Obesity occurred in 44 per cent of patients. Speculation concerning the role of obesity in the pathogenesis of coronary arteriosclerosis continues.

10. Our mortality rate was 26 per cent; it was greater in women, in the older age groups, and in patients with previous infarctions.

11. The most critical period following an infarction is the first seventy-two hours. Complications are also common some ten to fourteen days post-infarction. Congestive failure is the most common cause of death in this period.

Acknowledgment

We would like to acknowledge with appreciation the assistance of Dr. Gregory Quarry, M.D., resident physician at St. Joseph's Hospital, and Dr. Stanley Bardwell, M.D., resident in Internal Medicine at McLaren General Hospital, in compiling the data.

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(Continued on Page 1574)

Surgical Treatment of Pilonidal Disease

By J. Richard Heaton, M.D.
Grand Rapids, Michigan

APPROXIMATELY eighty years ago, J. M. Warren¹ and R. M. Hodges² published articles on pilonidal disease and started a controversy which has continued unabated to the present day. Their works suggested two possible etiologic mechanisms. One believed the disease was caused by an abnormal growth of hair and thus sponsored the theory of acquired origin. The other proposed a congenital origin by assuming that the condition arose through faulty closure of the neural canal. These two theories with many variations have been argued and discussed repeatedly down to the present day. Most authorities favor the latter and have produced embryologic evidence which is quite convincing. Recently, the excellent studies of Patey and Scarff,³ Davage⁴ and Gifford⁵ have renewed the attempt to explain this disease as an inflammatory reaction to hair. The principal point of contention is the mechanism by which hair can arrive at a subcutaneous position. Thus we return to a variation of the original theory and are reminded that the etiology of pilonidal disease has not been established.

The problem of treatment has been equally confusing and innumerable surgical methods have been devised in an attempt to decrease the high recurrence rate so often obtained. In order to determine our own results, we have reviewed the records of all patients with pilonidal disease operated at this clinic from January, 1949, to December, 1955. The criteria of this follow-up study are as follows: (1) A minimum of one year's elapsed postoperative time in all cases, and (2) clinical evaluation of wound healing to the date of this writing in all cases. One hundred patients meet the above standards and our results are considered below.

General Principles of Treatment

Regarding the general aspects of treatment, the following principles furnish a useful guide:

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1. Antibiotics have no value except for controlling an associated cellulitis. They do not actually penetrate the cyst or sinus to any appreciable extent and, therefore, can have little effect on the basic pathology.
2. Dyes should not be injected into the tract at the time of operation. In order to obtain good staining of the sinus and all of its ramifications, one must inject the dye with considerable pressure and surrounding tissues will also be stained.
3. Excessive amounts of tissue should not be removed. If all granulating and epithelialized tracts are removed along with the foreign material present, the removal of additional tissue serves no purpose except to make a larger wound. More tissue should be removed only as necessary to uncover pockets or to prevent excessive overhang of the wound edges.
4. The amount of suture material should be kept at a minimum. Pilonidal disease may be a foreign body reaction primarily and the introduction of additional foreign material should be curtailed.
5. Epilation of the area is a distinct advantage, but from a practical standpoint is difficult to accomplish. Swinton⁶ has used x-ray epilation and feels that this procedure makes primary closure of the wound more successful. However, the dose of radiation must be carefully controlled. Frequent shaving of the area is helpful although it is impossible to remove all the fine hair along the wound edge. Depilatory creams may eventually be the answer to this problem if one can be produced which is not excessively irritating.
6. Meticulous postoperative care is most important regardless of the surgical procedure used.

Technique of Operation

A simple technique of operation with excision of the diseased tissue only and without closure of the defect is effective.

The patient is placed in the left lateral position and the area is surgically prepared and draped. A probe is passed into the sinus tract and released by incision. This process is repeated until all visible sinuses are opened. The tract lining is then excised and a search is made for additional tracts or pockets. The edges of the wound are trimmed to prevent overhang and produce a smooth defect. Hemostasis is then accomplished and the wound is packed lightly with gauze.

Postoperative Care

The postoperative care consists of daily irrigation of the wound and removal of any loose packing. All packing is out by the third postoperative day. The patient remains in the hospital approximately eight to twelve days and is seen daily by his physician who debrides the wound with gauze or an applicator breaking down any webbing which has occurred. On discharge from the hospital the husband or wife or some other member of the family is instructed in this procedure and the patient returns for examination at two-week intervals. At these visits all hair is carefully shaved from the surrounding skin and excessive granulation tissue removed with the curette. Approximately two to four months are required for complete healing.

Analysis of Results

The average hospital stay was nine to twelve days. Following dismissal from the hospital the patients returned for treatment at two-week intervals for a period of two to four months.

We were surprised to find that 16 per cent of our patients were not cured by their first operation. However, 6 per cent of the cases were cured by a second operation, and the final failure rate reduced to 10 per cent. Included in this latter 10 per cent are nine patients who continue to have symptoms after one operation and one who continues to have symptoms after two operations. Fourteen per cent of this series had had one or more previous operations elsewhere.

Discussion

It will be noted that we have handled these cases in a very conservative manner using one of the older techniques which seemed to offer the best chance of permanent cure. The present study was inaugurated to determine whether or not we are justified in continuing along these same lines.

A review of the results of others who used a similar method of treatment proves interesting. In 1936 Kleckner⁷ reported a series of 160 cases and described his method as apparently identical with ours. He had "no recurrences." According to Palumbo et al⁸ the collective result in 4,884 cases treated by the open method showed an average recurrence rate of 12.7 per cent. Palumbo's own series of 151 patients treated by this method showed a 6.3 per cent recurrence rate. It is therefore difficult for us to explain our recurrence rate

of 16 per cent for the first operation. However, our shortest period of follow-up was one year and the longest seven years, and it is conceivable that this longer period has brought to light some recurrences that would surely have been missed in a short term follow-up. At any rate, it is obvious that the excellent results often reported are not easily reproduced even in a group of private patients who can be adequately followed and controlled.

Innumerable surgical procedures have been described and their very number attests to the fact that none is completely adequate. Perhaps a basic error in the general approach to the problem these past eighty years has been made. We believe that Patey and Scarff, Davage, Gifford, Swinton and others have pointed out a new line of approach which may render any or all of the present surgical methods far more successful. These writers have provided good evidence that the disease is acquired rather than congenital and that the key to successful treatment is the control of hair in the sacrococcygeal area. Swinton reports markedly improved results in a small series of cases by using carefully controlled epilating doses of x-radiation to the sacrococcygeal area combined with a closed operative technique. It seems probable that the development of some safer and satisfactory method of epilation will be the next great advance in the treatment of this difficult problem.

Summary

Regardless of its etiology, pilonidal sinus disease is a simple clinical entity. It may be annoying to patient and physician because of its rather high persistence or recurrence rate following surgical treatment.

One hundred patients treated surgically for pilonidal disease are evaluated by a follow-up of not less than one year nor more than seven years. Eighty-four patients were "cured" by one operation. Six patients were "cured" by a second operation and the remaining ten patients have persistent symptoms.

In all these cases a simple surgical excision was used and no closure attempted. Normal adjacent tissue was preserved. Despite this, a final recurrence rate of 10 per cent is recorded.

We are inclined to believe that further progress in the treatment of this condition will be achieved

(Continued on Page 1582)

A World of Medicine

International Newsletter No. 1

By Robert Hodgkinson, M.D.
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MANKIND'S development has been marked by an increase in the size of the unit to which men have given service; from the family grew the tribe, from the tribe the nation, and from the nation groups of nations. Today there is a desire and a need for us to think in terms of a world community and many in medicine serve such world organizations as the World Health Organization and the United Nations International Children's Emergency Fund (UNICEF). In attacking the problems of international disease, in working and living outside their countries of birth, these physicians see problems in a world setting and help to develop the concept of a "world mind." Although speaking of achievements in the worldwide campaigns against yaws, malaria, tuberculosis and other diseases, the words of Balachandra Rajan, President of the Executive Committee of UNICEF, apply equally to the development of international cooperation: "Realism compels us to acknowledge that we have made only the beginning of a beginning. Yet to have begun at all is itself significant. The way is a long one; but no one any longer believes that the way is impossible."

Some of the problems and achievements of world medicine are illustrated by the statistical data supplied by the WHO and the United Nations.¹ We may note that Nepal, Cambodia, Afghanistan, Viet Nam, Nigeria and the Sudan, even today, have less than one physician for every 50,000 inhabitants, while Israel, Austria, U.S.S.R., Germany, United States, New Zealand, Iceland, Italy, Hungary, Norway, Hawaii, Denmark, Canada, and Switzerland all have more than one physician for every thousand inhabitants.

The infantile mortality rate, one of the more sensitive indices of medical care, has been reduced to below thirty per thousand in Sweden (18.7), Hawaii, the Netherlands, Norway, Australia, New Zealand, England and Wales, Denmark and the United States (27.9). But in Guatemala, Bolivia, Chile, Ecuador, Peru, Egypt, the Gold Coast, Yugoslavia, Burma, India, the Philippines, and

in other countries for which figures are not available, it remains at over 100. It may be predicted that the infantile mortality rate in the latter countries will fall quickly in view of current progress and the fact that the conditions are little worse than those found elsewhere at the beginning of the century. In the Netherlands, for instance, the rate was 104 in 1900, 51 in 1930 and 20 in 1955. In Hawaii, the reduction was from 94.2 in 1926 to 20.5 in 1955. Many countries were in fact "undeveloped" but a short time ago.

North America

A group of local women founded the Hospital for Sick Children of Toronto in 1885. Several dwelling houses were successively used before a hospital to accommodate 180 patients was opened on College Street in 1892. This was gradually expanded until it had 320 beds. The hospital has been a pioneer in the care of children. For instance, in 1901 it was the first hospital in the Dominion to appoint a woman on the intern staff; in 1913 the nurses library was the only one of the kind in the world and contained every book on nursing printed prior to 1913; in 1914 it supplied the only scientifically pasteurized milk in the Dominion of Canada; in 1915 it established the first whooping cough clinic in America; and in 1936 it opened the country's first department of psychological medicine for children.

The new hospital completed in 1951 (Fig. 1) consists of a thirteen-floor building on University Avenue in downtown Toronto, close to the University, the Connaught Laboratories, the Department of Hygiene and the Banting Institute. The structure of the building allows for vertical expansion should the need arise and by this means a further 100 to 200 beds can be added. The service floor contains the main kitchen, a cafeteria and a hydrotherapy pool, and the main floor the admitting, emergency and out-patients departments and an x-ray unit for the use of out-patients. The first floor is devoted to administration, consulting rooms, a library, a medical museum and

two auditoria, of which the larger will seat 275 and the smaller eighty-five. The operating theatres, the x-ray department, dentistry and facilities for angiocardiology and electro-encephalography are on the second floor. The third floor is occupied by laboratories and research departments. The fourth to tenth floors provide accommodation for in-patients. The ward units on each floor are complete in all respects and there is no interchange of personnel or equipment. Surgical patients are in the northern two and the medical in the southern. The age groupings for each floor are kept as nearly uniform as possible so that an interchange of bed space is possible. The eleventh floor accommodates one large and three small conference rooms, and the twelfth and thirteenth floors elevator equipment and fans.

In-patients statistics² give an idea of the work of the hospital and the frequency with which various diseases result in either admission or death. Despite the use of antibiotics, infections are high in the list of diagnoses, and they account for 15 per cent of deaths. Of almost 20,000 admissions, 20 per cent were for the treatment of chronic tonsillitis and adenoiditis. The next commonest diagnosis was acute laryngotracheitis, which accounted for 3 per cent of admissions. After this in order of frequency came the following diseases, each with an incidence of over 2 per cent: esotropia, gastroenteritis due to unknown cause, congenital inguinal hernia, bronchopneumonia and nasopharyngitis (the common cold). There were 434 deaths at the hospital in 1955. Death was attributed to congenital abnormality in 138 instances, infection in seventy-two, malignant disease (including leukemia) in forty-one, and postnatal asphyxia and atelectasis in fifty-eight. The deaths from infections included twenty-one due to bronchopneumonia, six to lobar pneumonia, ten to infections of the newborn, eleven to meningitis (pneumococcus five, *H. influenzae* three, *E. coli* one, meningococcus two), eight to gastroenteritis, eight to septicemia and pyemia, two to empyema and abscess of the lung, one to acute bronchitis, one to acute poliomyelitis, one to infectious hepatitis, one to measles, one to tetanus and one to Kaposi's varicelliform eruption.

The second annual report of the Research Institute³ of the hospital, which is under the direction of Dr. A. J. Rhodes, provides a picture of an active and productive group of workers. The staff consists of twenty-seven physicians or science

graduates working full time on research, and twenty-four physicians, dentists or scientists on a part-time basis. As a matter of policy, the number of full-time workers is being increased rather than part-time workers. Financial assistance from commercial organizations and private individuals is welcome, but it is hoped that such money will be contributed to the research program in general rather than to specific programs.

In the Virus Research Department, Dr. A. J. Rhodes has had the assistance of Dr. A. J. Beale, a virologist from the Medical Research Council in England. It was shown that many patients diagnosed as nonparalytic poliomyelitis were infected with the ECHO virus. The relationship of the group B Coxsackie viruses to meningitis was investigated. New tissue culture techniques have been used to study the etiology of epidemic croup (acute laryngo-tracheo-bronchitis) and what is apparently a new virus has been isolated from several cases. Dr. T. E. Roy of the bacteriology department has continued his studies on antibiotic sensitivity of pathogenic bacteria. Of 1,400 strains of staphylococcus, 60 per cent were resistant to penicillin, 39 per cent to streptomycin, 45 per cent to the tetracycline group, 7 per cent to erythromycin, 6 per cent to chloramphenicol and 0.5 per cent to bacitracin. Strains from patients in the outpatient department showed only half the incidence of resistance of strains recovered from in-patients.

The major activity of the institute is in the Biochemical Research Chemical Laboratories mainly in cooperation with the staff of the metabolic ward. Among many other projects, metabolic disturbances in relation to abnormal skeletal calcification in children have been studied. There has been research into improved methods of therapy for vitamin D resistant ricket. Rapid healing of the lesions occurred in these children without increasing vitamin D intake by establishing physiologic levels of serum phosphorus. The metabolic ward, a self-contained unit under the direction of Dr. A. L. Chute, Chief of Pediatrics, was opened in February, 1955, and during the next ten months fifty-one admissions of forty patients were made to the ward with an average stay of four weeks. Steatorrhoea, pituitary dwarfism, calcium and phosphorus metabolisms, renal diseases and the children of diabetic mothers have been studied on this unit.

In the surgical department, records of thirty-six

patients suffering from bone and joint tuberculosis and treated with the new chemotherapeutic drugs showed that 13 were apparently cured without fusion operation. All of these showed radiologic

from the Sudan; and Dr. P. L. LeRoux and Dr. J. Newsome of Great Britain. A survey of the incidence of the disease has been taking place since 1950, and it was shown that the infection is com-



Fig. 1. Hospital for Sick Children, Toronto.

evidence of bone destruction but progressed to clinical and radiologic healing. In the department of neurology, Dr. J. Strobo Prichard and Dr. Douglas McGreal have analyzed the findings on 500 children suffering from convulsions in regard to etiologic factors, family and personal history and clinical findings. Members of the department of pediatrics have studied the causes of neonatal death in six obstetrical units in Toronto's hospitals. A series of lecture-demonstrations are being given throughout Ontario to focus attention on this problem. The inheritance of certain serum proteins has been demonstrated by the research group on genetics, and in an investigation of the etiologic factors of erythroblastosis foetalis, an analysis of seventy families provided further proof that the ABO groups are exerting an environmental influence on the sensitization of the Rh negative women. The high frequency of sensitization among Rh negative sisters suggests a familial incidence. In the cardiology department there is a program for the study of the effects of sulfonamides and penicillin in preventing recurrences of rheumatic fever.

Africa

An expert committee on schistosomiasis met at Brazzaville, French Equatorial Africa, from November 26 through December 8, 1956. The experts included Dr. W. Alves, Dr. D. M. Blair, and Mr. H. V. de Villiers Clarke of Southern Rhodesia; Dr. Botha de Meillon and Dr. R. J. Pitchford of South Africa; Dr. E. T. Abdel Malek

mon in East and West Africa, Egypt, the Union of South Africa, and Madagascar. No cases have been reported from South-West Africa, Ruanda Urundi, Basutoland, and Mauritius. The conference discussed control methods with molluscides and by improved sanitation. Bilharziasis is more common in animals than in humans. It is found in cattle, sheep, goats, camels, rodents, dogs, equines, antelopes, buffaloes, and even elephants. A study in the Philippines, however, has shown that man is responsible for 75 per cent of the production of parasites, while domestic animals account for the remaining 25 per cent. The importance of the animal reservoir of infection therefore remains uncertain.

Problems of surgery in Central and East Africa were discussed by Dr. Otto Bruckschwaiger recently.⁴ An anesthetic machine is a necessity where a supply of oxygen is available, as open ether can rarely be used since heat and frequently altitude produce rapid evaporation. Chloroform may be used, but intravenous and local anesthesia are employed extensively.

Patients for operation are usually suffering from malnutrition, the result of poor diet, chronic diarrhea or other tropical diseases, and religious fasting. An orthodox Moslem is not allowed to swallow even his saliva during the four weeks of Ramadan and intravenous treatment or other medication is not permitted. Food is taken in small amounts during the night. Coptics exclude from their diet for four weeks any kind of food of animal origin. In these circumstances iron and

vitamin administration is given routinely before surgery. Blood transfusion has to be used with care, since most of the donors frequently suffer from anemia, give a positive Kahn reaction, or show evidence of other infectious diseases. The lack of a reliable electricity supply frequently makes refrigeration impossible, so that blood banks cannot be instituted. In these circumstances, a plasma expander, such as polyvinylpyrrolidone, has a definite place.

Injuries are common due to traffic in the cities, to knife and gunshot wounds and the bites of animals, snakes and mules in the country. Tetanus and rabies occur. Cutaneous ulcers are frequent and serious. These may be the result of specific infections, such as blastomycosis, coccidioidosis and other fungal diseases, syphilis, leprosy, anthrax, leishmaniasis and yaws. In hot, dry, sandy regions, desert sore occurs (Veldt sore or Barcoo rot). Dr. Bruckschwaiger observes that diphtheria or pseudodiphtheria bacilli could be frequently demonstrated, and the condition responds to antibiotics and diphtheria antiserum. Tropical ulcers are found in damp, steamy climates, and usually affect the lower part of the leg. Vincent's spirochetes and fusiform bacilli are commonly found in these ulcers.

Europe

Just a hundred years ago the first of the three main contributions to the treatment of epilepsy was made—the discovery of the bromides. This was followed by the introduction of the sedative barbiturates by Hauptmann in 1912, and of Dilantin, a hydantoin, by Merritt and Putnam of Harvard Medical School in 1936. Introduction of the bromides by Sir Charles Locock in 1857 was significant because it led to the establishment of scientific treatment for the epileptic and contributed to the later introduction of other anti-convulsants. Previously, treatment had varied from such harmless rituals as wearing amulets containing "the root of yellow mullein dug in silence at midnight," walking three times around the communion table of a church at midnight, or the consumption of bizarre, nauseating concoctions containing human or animal remains. The *Stamford Mercury* of October 8, 1858, reported that "a collier's wife applied to the sexton for ever so small a portion of a human skull for the purpose of grating it similar to ginger and adding it to a nurture which she would give to her daughter

as a remedy against epilepsy." The *Boston Medical & Surgical Journal* of December 25, 1856, observes that besides amputating limbs, amputation of the testicles seems to have been successful in curing epilepsy. Beatings and imprisonment under appalling conditions were common. Introduction of the bromides coincided with a period of social reform, part of which was aimed at the improvement of the lot of the mentally sick and the epileptic. When Merritt and Putnam in 1936 were testing their theory that the effectiveness of bromides and phenobarbital were not based purely on their sedative properties, they found the amount of phenobarbital which would prevent an animal from walking raised the threshold for convulsions three or four times the original level, whereas a similar amount of bromide only raised the threshold 50 per cent.

Sir Charles Locock⁵ introduced potassium bromide for the treatment of epilepsy at a meeting of the Royal Medical and Chirurgical Society on May 11, 1857, at which he was acting as chairman. Following an analysis of fifty-two cases of epilepsy by Edward H. Sieveking, an assistant physician at St. Mary's Hospital, Locock remarked that two causes of epilepsy, dentition and onanism had not been mentioned in the paper. He had read in the *British and Foreign Review* an account of an experiment performed by a German on himself with potassium bromide. The experimenter had found that this drug produced temporary impotency. With this background, Dr. Locock had treated fourteen or fifteen cases of epilepsy with the drug over a period of fourteen months, and only one had failed to respond.

The career of Sir Charles Locock was based on his skill and shrewd practical ability as a physician-accoucheur. Apart from a number of articles in the *Cyclopaedia of Practical Medicine* in 1833 and 1834, he contributed little to medical writing. In fact, in his presidential address to the Royal Medical and Chirurgical Society he observed "For many years I have been too much engrossed with the more active pursuits of my profession to be able to devote myself to those labors which might have increased if not enriched our stores of medical literature; and I have felt that I have neither the strength nor health enough to have attempted both departments." His health was always a preoccupation and a story is told of him that he wrote to a medical colleague he did not know personally requesting his opinion about

a patient's heart. He presented himself instead of the patient and received the letter "Dear Dr. Locock: I have examined your patient's heart and he has no more heart disease than you or I have."

Dr. Locock qualified in Edinburgh and wrote as his doctoral thesis, "De Cordis Palpitatione," which he presented in 1821. Transferring from Edinburgh to London he made very rapid progress in his career. When most London physicians were hardly beginning to make their name, he had attained the highest position open to him in being selected, at the age of forty, as Queen Victoria's physician-accoucheur. During his career in the town his practice was extensive, perhaps the largest ever enjoyed by an obstetrical physician.

South and Central America

At the Ninth Directing Council Meeting of the Pan-American Sanitary organization which took place in Antigua, Guatemala, in September, 1956, a budget of almost four million dollars was approved for 1957. Approximately a third of this sum is derived from the World Health Organization and the United Nations Technical Assistance Program. Top priority was allocated to malaria eradication in the Americas, and the U. S. government contributed a further one and a half million dollars for this purpose. Although a large amount of the malaria cases in the Western Hemisphere occur in Mexico, the Mexican government hopes to eradicate the disease within five years. Leprosy was discussed and it was noted that the psychological approach to the disease has been completely changed by modern treatment with the sulphones. Although a more lengthy project than malaria control, it is nevertheless hoped that leprosy also can be eliminated from the Americas.

The Pan-American Sanitary Bureau⁶ is the oldest international health agency in the world and it acts as the regional office for the youngest, the World Health Organization. It was created in 1902 to coordinate and assist public health programs in the various countries. In 1924, broader authority was given by the Pan-American Sanitary Code which was a treaty ratified by all twenty-one American republics. Although the head offices are in Washington, there are zonal offices in Mexico, Guatemala, Lima, Rio de Janeiro and Buenos Aires. There is also a field office in Kingston, Jamaica, to deal with the thirty-three separate administrations in the Caribbean. Conferences are

held every four years and Directing Council meetings are held in the intervening period.

The bureau transmits reports of quarantinable diseases to neighboring countries and to the World Health Organization headquarters in Geneva. From Geneva the information is broadcast by fifteen radio stations for ships at sea and it is also incorporated in the weekly epidemiologic report. The bureau also promotes the collection of health vital statistics, work on the standardization of biologic products, and the international control of drug addiction. Other activities include education and training, public health administration, and control of communicable disease. In the field of education, special teaching courses are held, over 300 fellowships a year are given to promote training of public health personnel, a medical information center promotes free exchange of information and there is a regional center for training health statisticians in Chile. In public health administration the bureau accepts responsibility for the Institute of Nutrition of Central America and Panama (INCAP) which is located in Guatemala City and is a joint enterprise of the six central American republics. Advice is given on mental health programs and the planning of rural sanitation and the supply of pure water. In the control of communicable diseases the bureau has sought to eliminate the urban vector of yellow fever, *Aedes aegypti*, and nine countries including Brazil are now declared free of this mosquito. Assistance given to two South American laboratories has enabled them to produce anti-yellow fever vaccine for the protection of people living adjacent to jungle areas. In Haiti almost all the population has been treated for yaws, and the incidence rate has now dropped to below 1 per cent. The Bureau acts as the Regional Influenza Center for W.H.O. and it has in turn designated seventeen laboratories and one reference center to collect information on the spread of influenza. Four countries have conducted mass vaccination programs against diphtheria and whooping cough and aid has been given in the production of the necessary vaccines.

Southeast Asia

In welcoming 850 tuberculosis specialists and workers from sixty countries who gathered in New Delhi, January 7 to 11, 1957, to take part in the 14th International Tuberculosis Conference, the President of India Dr. Rajendra Prasad stated

that, although tuberculosis has ceased to be a serious health problem in the more advanced countries, yet it remains one of considerable magnitude in Southeast Asia. He felt that in India, where people could spend their lives largely in the open air and sunshine, it would be easier to control the disease than in countries where the climate necessitated more indoor living. Nevertheless, there was serious difficulty due to under-nutrition and some habits of life. The Health Minister, Rajkumari Amrit Kaur, observed that nearly 170 million persons will have been vaccinated against tuberculosis by 1960, and already 80 million people had been tuberculin tested, with 28 million vaccinated. There were 235 tuberculosis clinics in the country and 300 would be established during the current Five-Year plan. In addition, a number of teaching hospitals would train workers and demonstrate how modern clinics ought to function with emphasis on prevention. Four such centers were already operating, one was in the process of being established and ten more would be added during the current Five-Year plan. Professor Etienne Bernard, Secretary-General of the International Union against Tuberculosis, was of the opinion that the only way to solve the problem of tuberculosis was to increase the power of resistance of the subject.

In a discussion on the "Diagnostic and Biological Problem of Isoniazid-resistant Tubercle Bacilli," Dr. Walsh McDermott pointed out that this drug, because of its therapeutic efficacy and cheapness, was specially useful in countries like India where patients were numerous. He suggested that children and young adults who were infected with tubercle bacilli or were found to be tuberculin positive should be treated even if there were no symptoms of the disease. Dr. P. V. Benjamin, Tuberculosis Adviser to the Government of India and President of the International Union against Tuberculosis, summarized the majority view as being that Isoniazid should be used with either P.A.S. or streptomycin.

At a press conference, Dr. Carroll E. Palmer stated that, although there were reactions to BCG, the vaccine was of "enormous advantage" in checking the disease, and Dr. A. Frappier of Canada felt that vaccination with BCG which had been tried in Canada since 1926 was a harmless procedure even in people of low nutrition. Dr. Philip Chebanov of the USSR observed that the procedure had been used in the Soviet Union

since 1924 and that it was now obligatory that children in maternity hospitals should be vaccinated. Prof. Etienne Bernard said he knew of no country which had withdrawn or reduced the tempo of its BCG campaign.

Whether persons suffering from lung tuberculosis should be treated in sanatoria or as out-patients was discussed at a sub-committee under the chairmanship of Prof. J. W. Crofton of Edinburgh. The consensus of opinion from representatives from Germany, Canada, Denmark, Egypt, India, Spain, Switzerland, the U. S. and the USSR, was that with certain limitations the clinical and epidemiologic results of ambulatory chemotherapy were as good as those obtained in sanatoria. Dr. A. Latif Hassan of Egypt pointed out that it might be dangerous and might retard the progress of the tuberculosis campaign if its limitations and dangers were not fully known to all practicing physicians. Dr. M. Gilbert of Switzerland felt that in severe cases there were advantages in making the initial attack in a hospital or sanatorium, while Dr. B. K. Sikand of India said that hospitalization was essential for surgery only.

Australia and New Zealand

In the *Australian Medical Journal*⁷ Maori attitudes to sickness are discussed by Dr. G. Blake-Palmer, Medical Superintendent, Seacliff Hospital, Seacliff, Otago, New Zealand. The inherent danger in some Maori therapy, such as the favorite method of immersing the sick in water at dawn and sundown—not infrequently a stagnant cattle pond—and the serious delay in the instituting of effective treatment brought the Western physician and the present-day Tohunga (one claiming skills in ancient lore) not infrequently into conflict. The former, too, may also be confused by his ignorance of Maori magic. Apart from this, Maori medicine contained, before the arrival of the European, many valuable methods of treatment and is part of a culture embracing modes of conduct absent in modern civilization.

Formerly the Maoris believed that illness was due to violations of tapu, the intervention of demons, or, not infrequently, the machinations of the Tohunga Makutu (a man skilled in dealing with evil or malignant mana). If disease was due to a breach of tapu, neglect of the sick was logical and not due to callous indifference. The sick person was a source of danger and if he died his dwelling had to be destroyed. Therefore, he was

often cared for in an outhouse. In addition to magical practices, Maori medicine made use of herbs and physical methods of treatment. For example, fractures were treated by the use of lace-bark in a similar manner to Gooch splinting, convulsions were treated by burying the patient up to the neck in sand or loose soil to minimize injury, and the partially drowned were resuscitated by suspending the affected person by the legs round the neck of a large warrior who grasped the wrists and moved the person up and down.

Some parts of the body were considered to be highly tapu. All female generative secretions were regarded as highly noxious, and one of the objections to entering European maternity hospitals has been that the placenta could not be buried in a secret place. In contrast, the male organ represented life, and many of the ceremonies for protection against disease and danger took place in the village latrine. The Maori attached great importance to kinship and family and the center of Maori culture was the open space in front of the meeting house, the supports of which were covered with ancestral figures. A free sexual code was practiced and there was no hindrance to free premarital sex relations between adolescents. Children were welcomed and freely adopted. After marriage a reasonable measure of fidelity was expected however. After periods of intense spoiling and petting children were allowed a great deal of freedom as judged by European standards.

The mentally ill were frequently feared and sometimes eliminated. Today the admission rate of Maoris to mental institutes is significantly lower

than that of those of European origin, and this cannot be accounted for solely by reluctance to seek aid. Maori culture contains within itself some "mental health coping mechanisms" or factors which serve to protect a person's mental life. There is first of all the sense of oneness and belonging to the tribal organization. "A Maori gathering may be said to have lifted gossip to the dignity of a mental health coping mechanism" and checks not only nonconformist behavior but also publicly explores new methods of behavior. The ability of the Maori to develop grievances especially against the Europeans helps to preserve the sense of integrity of the Maori community and provides excuses for non-cooperation. Alcohol which may be used to excess is another coping mechanism. The Maori is also adept at transferring his attention rapidly away from an immediate threat of an unpleasant problem.

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Prolapse of Gastric Mucosa

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PROLAPSING gastric mucosa is the extrusion of the gastric mucosa through the pylorus into the duodenum.¹ This is an abnormality involving redundancy of the mucosal folds in the pre-pyloric region. "If these folds are sufficiently long and sufficiently loose they can be washed through the pylorus and into the duodenum during normal peristalsis."² The first case was reported by von Schmieden in 1911, although he did not mention actual extrusion of the antral mucosa through the pylorus into the duodenum. In 1925, Eliason and Wright³ described a case in which they found a complete cuff of redundant gastric mucous membrane slipping through the pylorus and palpable as a doughy mass in the duodenum at operation. During palpation it slipped back into the stomach, but when the stomach was opened it could again be pushed into the duodenum. In 1926 Eliason, Pendergass, and Wright⁴ reported two more cases and listed diagnostic criteria for x-ray demonstration of pedunculated growths and prolapsed mucosa. Only isolated reports are found in the literature from that time until 1946, when Scott^{5,6} presented an excellent review of the subject and revived an interest in its diagnosis and clinical significance. In a review of 1,346 cases of diseases of the upper gastrointestinal tract, he found fourteen cases of prolapse, an incidence of 1.04 per cent. Others have reported an incidence of from .1 to 14 per cent in upper gastrointestinal tract roentgen examinations.^{7,8} In 1951, Kaplan and Shepard⁹ reviewed the literature and found forty cases of prolapsed gastric mucosa which were proved at operation, and added four cases of their own. They found well over 100 cases of prolapse reported from roentgenographic findings. One other case, previously reported and proved by surgery, was not included in their review.¹⁰ Johnson in 1952 reviewed 1,593 cases of upper gastrointestinal roentgenologic examinations and found 117 cases of prolapse, an incidence of 7.3 per cent.

Etiology and Pathology

Forssell¹¹ showed that the muscularis mucosae were capable of independent motion and were largely responsible for the rugal folds. Golden has explained that during antral systole the muscularis mucosa, for some unknown reason, fails to keep the mucosal folds in their normal longitudinal distribution and, if the folds are not so orientated, the mucosa becomes rolled up and is pushed along in the direction of the pylorus. Others have thought that chronic irritation of the gastric mucosa due to physical, nutritional, chemical, functional, or bacterial causes might result in chronic inflammation and hypertrophy. Scott considered that conditions necessary for prolapse occurred only after the flexible fibers of the submucosa had become stretched and loosened by abnormal peristalsis and are in time irritated by neurogenic or chemical stimuli or a combination of both. Manning and Highsmith¹² emphasized the importance of chronic hypertrophic gastritis from any cause involving the antral mucosa. The interference with the normal mechanism of antral systole will result in the development of prolapsing redundant mucosa in the majority of cases.

Manning and Gunter¹³ were able to study the gross and microscopic pathological manifestations in six cases. In five there was a mild to severe gastritis. Grossly and microscopically the gastritis appeared to be of the hypertrophic type, except in one case in which atrophic changes predominated. In four cases the submucosa was unusually loose, so that it appeared as a tongue-like polypoid fold protruding through the pylorus. In one case the prolapsed mucosa was an hypertrophied fold which was forced caudally into the duodenum by the massive pyloric muscle. The pyloric muscle was thickened, and the pyloric channel appeared narrowed in four cases. The muscularis mucosae were also thickened in three cases and showed myelolytic infiltration in one case.

The prolapse may be unilateral or circular and

This study was done at the Department of Surgery, University of Michigan Hospital, Ann Arbor, Michigan.

complete. In the unilateral type a portion of the prepyloric gastric mucosa slips into or through the pyloric canal presenting itself on one side of the base of the duodenal bulb projecting into the lumen. The pyloric sphincter contracts on the mass, the end of which becomes swollen and engorged, while the portion in the canal is stretched out. In the circular type there is a complete separation of the prepyloric mucosa from its muscularis. The mucosa slides through the pylorus in the form of a cylinder propelled by peristalsis and may remain fixed there in a manner similar to a small intestinal intussusception, except that here only gastric mucosa is involved, whereas in the small gut all the layers are involved. The cylinder of tissue presents in the base of the bulb of the duodenum, and a central depression marks the pyloric canal. There is also a certain degree of obstruction, inflammation, and hemorrhage in cases of prolapsed antral mucosa. In one case of prolapsed mucosa, malignant change was noted. A malignant neoplasm arose in a polyp which was attached to the redundant gastric mucosa.^{14,15} Prolapsed mucosa can become strangulated or eroded and occasionally a massive hemorrhage may complicate this condition. Sometimes an ulceration may develop on the prolapsed portion and it can co-exist with duodenal ulcer.¹

Symptoms

There is a gamut of symptoms, protean and vague as they might be, related to prolapse of the gastric mucosa into the duodenum which may give a clue to consider this condition in the differential diagnosis. It is also possible to have this condition without any symptoms referable to upper gastrointestinal disease other than just loss of weight. There is no symptom-complex pathognomonic of the disease and it is rarely diagnosed before roentgen studies. The symptoms include intermittent epigastric distress, fullness, gaseous distention, nausea, vomiting—often without nausea preceding. About 25 per cent are relieved and 75 per cent are aggravated by food, and only a few relieved by alkalies. Obstructive symptoms with distress after eating were noted by Rees. In several cases, gross hematemesis occurred. Pendergass and his associates stressed the incidence of secondary anemia of a severe grade due to ulceration and oozing. Ellison and Squire¹⁶ were impressed by cramp-like distress in the epigastrium of varying severity, generally worse under nervous tension.

One should suspect this condition in any atypical history of peptic ulcer. The symptoms of nausea, vomiting, and epigastric pain come on periodically and suddenly with an interval of relief. Change in position, such as lying down, turning from one side to the other may relieve or aggravate the symptoms. Some patients have pain only at night and are awakened and forced to get up. The duration of the symptoms may be for a few hours or for many years. Both sexes are afflicted, but males predominate. The age incidence is from eighteen to eighty-three years of age. Backus¹⁷ concludes that moderate degrees of redundancy of the pyloric mucosa are not uncommon and that unless there is an associated gastritis or actual prolapse of the gastric mucosa into the duodenum interfering with gastric emptying, symptoms are not produced. Other investigators believe lesser degrees of prolapse without associated gastritis are capable of producing symptoms.^{18,19}

Roentgen-ray Diagnosis

The diagnosis of extrusion of the gastric mucosa through the pylorus into the duodenum is fundamentally roentgenologic. An occasional case may be suspected before the diagnosis is established. However, there is no possible confirmation except by x-ray examination or by operation. Patterson and Weintraub have briefly listed the following radiologic criteria to make a diagnosis of this condition:

"1. A cauliflower-like defect in the base of the duodenal bulb. This defect is also described as being 'mushroom' or 'umbrella' shape.

"2. Folds of the gastric mucosa visualized in the pyloric canal and in the base of the duodenal bulb. The pyloric canal is frequently widened. The prone and the prone right-oblique positions are the best for visualizing this condition, while very often it is not seen in the erect position. The prolapse is frequently noted during the fluoroscopic observation and spot films taken at that time are valuable. It must be remembered that the presence of the prolapse may be noted on one examination but be absent at a second examination or vice versa. Negative x-ray findings do not exclude the disease. If symptoms warrant, the roentgenologic examination should be repeated.

"The most common error in the x-ray diagnosis of this condition is when it is mistaken for gastric prolapse, a defect in the base of the duodenal bulb caused by pressure or overlapping of the pyloric valve. This defect is crescent-shaped and smooth in outline. Less frequently a pedunculated polyp, induration secondary to an ulcer, or inflammatory changes in the duodenal mucosa may be misinterpreted as prolapse of the gastric mucosa. Hypertrophied mucosal folds are often seen in

the antrum of the stomach suggesting the presence of gastritis. On the other hand, prolapse may occur with no evidence of gastritis."

Gastric polyp may sometimes be diagnosed as prolapse, but when in doubt a laparotomy should be performed upon the patient in question.

The clinical importance cannot always be measured by the roentgen film appearance. For example, "This patient was treated for some months before I began to wonder if the prolapse might explain her failure to respond to treatment. This case with no suggestion whatever of prolapse on her first films and only a very poor demonstration on the three-hour film, was operated on and proved to have a strangulated prolapsed mucosa and a hypertrophied pyloric muscle. A pyloroplasty gave complete relief. The redundant mucosa was not excised." . . . cited by Johnson¹ in 1952.

Treatment

The patient with prolapsed gastric mucosa responds satisfactorily to the rational medical treatment, and a few, and only a few, do not respond to treatment. The latter patients are then candidates for surgical therapy, and some others may become surgical emergencies because of pain, intractable pyloric obstruction, or severe hemorrhage due to this condition uncomplicated and uncomitant with other diseases such as peptic ulcer, or neoplasm of the stomach and duodenum. The medical treatment creates no problem, and therefore the remarks will hereinafter be limited to surgical treatment only as it also further proves the roentgen diagnosis. In the literature on the surgical treatment of prolapse of the gastric mucosa, there are different opinions as to what type of procedure should be used upon uncomplicated cases of prolapsing gastric mucosa. Some surgeons advocate pyloroplasty of the Heineke-Mikulicz type; others, sub-total gastric resection.²⁰

From January 1, 1948, to December 31, 1954, there were about 24,000 upper gastrointestinal series done at the University of Michigan Hospital, thirty-four of which were roentgenologically diagnosed as prolapse of the gastric mucosa through the pylorus into the duodenal bulb. Only two were treated surgically, briefly depicted below:

Case 1 (677698):—A fifty-four-year-old white man was admitted on March 5, 1950, to the University of Michigan Hospital complaining of fatigue, nausea, and vomiting after meals for the past two years prior to this admission. X-rays revealed at this time a duodenal

ulcer. The patient was relieved for one year by an ulcer regime. However, his symptoms recurred and became more severe as he wasn't able to tolerate solid foods of any kind.



Fig. 1. (Case 2.) Prolapse of the gastric mucosa through the pylorus into the duodenal bulb.

Physical examination revealed a white man of stated age, poorly nourished, pale, with sunken eyes, in no apparent distress. All vital signs were within normal limits and the physical examination was not remarkable. Laboratory: Urinalysis—2 to 3 plus sugar with subsequent clearing under therapy, CO₂; 75 Vol. per cent; NPN 44 mg. per cent. Other laboratory studies were within normal limits.

A review of the barium studies of the upper gastrointestinal tract showed an obstructive lesion at the gastric outlet which was thought to be compatible with a prolapse of redundant gastric mucosa, possibly a gastric polyp.

On March 10, 1950, a partial gastrectomy was done. At operation all organs had a normal appearance except for minimal scarring at the first portion of the duodenum just beyond the pylorus, which was considered as questionable evidence of scar due to previous duodenal ulcer. The duodenal bulb was not deformed. No polyp or prolapse of the gastric mucosa at the pyloric canal could be detected at the time of operation. Decision was made to do a partial gastric resection because of the intractable pyloric obstruction clinically. A Hofmeister type of subtotal gastrectomy was performed with retrocolic gastrojejunostomy. The patient tolerated the procedure well except for slight nausea and vomiting during the first few postoperative days. His recovery was uneventful. On March 19, 1950, he was discharged from the hospital and was instructed in a Meulengracht diet. At discharge he weighed 137 lbs. He was seen at the

clinic on March 29, 1950, feeling fine, gaining strength and weight.

Pathology Report: 1. Chronic hypertrophic gastritis. Grossly the appearances were compatible with prolapse. This condition has no microscopic features which are distinctive. 2. Polypoid structure in the gastric mucosa. This differs from the simple mucosal polyp in that the muscularis mucosae extends into the polypoid mass. No malignancy.

Case 2 (788086):—A fifty-three-year-old white man was first admitted to the University of Michigan Hospital July 3, 1954, with a history of good health until 1949 when nausea, vomiting and epigastric pain occurred. A cholecystectomy was done shortly after onset of these symptoms. The patient's symptoms continued, and somewhat later he was reoperated upon with a preoperative diagnosis of "reformed gallbladder." Again the patient was not well, as nausea, vomiting, and epigastric pain continued. Therefore, he was referred to the University Hospital for further studies and treatment. Except for hypospadias, physical examination was not remarkable. Vital signs and laboratory findings were within normal limits.

Roentgen-ray diagnosis: 1. Upper gastrointestinal series: Esophageal aerophagia and prolapse of the gastric mucosa through the pylorus into the duodenum (Fig. 1). 2. Gallbladder: Non-visualized and no regional opaque calculi could be identified.

The patient was operated upon July 22, 1954. The cystic duct stump was identified being approximately 3 mm. in length. The common bile duct was normal to inspection and palpation. No abnormalities were found in the abdomen and pelvic organs. The stomach and duodenum were normal to inspection and palpation. A 4 cm. incision in the pylorus was made in the direction of the long axis of the bowel on the anterior surface of the duodenum. The gastric antrum was inspected and palpated and no evidence of present or past ulceration was found. There was approximately 1¼ cms. of prolapse of the gastric mucosa into the duodenal bulb. This did not appear to be edematous or show signs of incarceration. A Heineke-Mikulicz type of pyloroplasty was performed. The previous longitudinal incision over the anterior surface of the pylorus was closed transversely, thus increasing the pyloric canal by 50 per cent.

The postoperative course was entirely uneventful, and the patient was discharged on July 30, 1954. He was seen on August 30, 1954, in the outpatient clinic without further complaints of gastrointestinal discomfort. He has never returned to the clinic since his last visit.

Conclusions

Prolapse of the gastric mucosa through the pylorus into the duodenal bulb is a frequent benign disease of the upper gastrointestinal tract. Many cases are asymptomatic. Most with symptoms can be relieved by proper medical treatment, but a few cases need operative treatment for relief

of symptoms. The condition can be diagnosed only by roentgen-ray and can be further proved by an operation.

Thirty-four cases of prolapse of the gastric mucosa were roentgenologically diagnosed in the course of 24,000 upper gastrointestinal series at the University of Michigan Hospital. Two patients were operated upon, and in each case the diagnosis was substantiated. One was treated by partial gastric resection and the other by a Heineke-Mikulicz pyloroplasty, and each patient was relieved of his symptoms. The surgical procedure²¹ must not impair the nutritional status of the patient, and therefore mature judgment and experience is of inestimable value as far as the future welfare of the patient is concerned.

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Kahn and Treponema Pallidum Complement Fixation Results in Syphilis and False Positive Factors

By Joseph F. Guyon, M.D.,
and Clinton C. Cole
Flint, Michigan

SINCE the fairly recent development of various serologic procedures for the detection of syphilis with antigens prepared from the *Treponema pallidum*, various workers have presented comparative studies between these newly developed tests and Standard Tests for Syphilis. Kahn et al compared the Standard Kahn Test with Treponemal Immobilization (TPI) results, and Magnusson and Portnoy have reported their findings in comparing the TPI with the *Treponema Pallidum* Complement Fixation Test (TPCF) and a standard complement fixation procedure. So far as the authors are aware, however, there have been no reported comparisons between the Kahn test and the TPCF. Since the Kahn test is probably the most widely employed test of its kind throughout the world and certainly within the state of Michigan, such a study was made in the Flint Department of Health Laboratory and Venereal Disease Clinic.

The study presented represents the laboratory results and clinical findings of the patients from 4811 blood specimens submitted for routine examination, and was in no way conducted on a selective basis.

All sera giving reactive or weakly reactive Kahn results were tested further with TPCF antigen according to the method outlined by Portnoy and his associates. In addition to those sera exhibiting reactive STS results, there were included twelve that had been reported reactive from one to six weeks previously but which were nonreactive at the time of examination in our own laboratory. As a laboratory control for the study, one hundred sera from donors with no previous history of reactive Kahn tests were examined in the same manner.

The accompanying tables show comparative results between the two test procedures according to stage of disease and history of previous antiluetic treatment.

Dr. Guyon is with the Venereal Disease Clinic, and Mr. Cole is Laboratory Director, Flint Health Department.

It is realized that some of the charts shown do not represent a large enough number of cases to be statistically significant; however, it is interesting to note that there appears to be a very excellent correlation in results obtained with the Standard Kahn Test and the *Treponema Pallidum* Complement Fixation Test in untreated syphilis. Of equal interest is the fact that in every instance of disparity in test results in treated cases, the difference seemingly is that of greater sensitivity with the Standard Test. Whether negativity in TPCF results is indicative of adequacy of treatment or whether sero-fastness is possible also with the newer tests is a matter of conjecture, requiring additional studies and comparisons.

As one might well expect, the greatest difference in test results appears among the thirty-two false positive reactors, and the disagreement might well have approached 100 per cent had the original reactive sera been available for TPCF testing. This fact stresses the importance of repeated serologic testing in suspected false positives, which as Kahn and others have shown are of an unstable nature and frequently not reproducible.

The utilization of both of these tests was especially helpful in those cases in which there was no positive history and the evaluation of the physical findings was difficult. In evaluating a history of a rash or a nonspecific dermatitis, the additional support of a reactive TPCF in conjunction with the Kahn served to establish a more substantial basis for diagnosis.

The difficulty of obtaining a previous history of venereal disease or treatment, plus the dearth of physical findings places the burden for diagnosis on a correlation of these two tests. In previously treated patients where there had been a variation of STS results, the TPCF served to strengthen the clinical impression.

Without exception, the previously untreated cases had no specific history or positive physical findings to support the diagnosis, and the complete correlation of the tests was the only means for establishing a criterion for treatment.

TABLE I. CONTROL. (STS NONREACTIVE SERA)

Number of Cases	Laboratory Results—Kahn vs. TPCF			
	Agreement		Disagreement	
	Number	Per Cent	Number	Per Cent
100	100	100.0	0	0.0

TABLE II. LATE LATENT SYPHILIS

Previous History	Number of Cases	Laboratory Results—Kahn vs. TPCF			
		Agreement		Disagreement	
		Number	Per Cent	Number	Per Cent
Treated	84	70	83.3	14*	16.7
Untreated	24	24	100.0	0	0.0

*Kahn reactive, TPCF nonreactive.

Summary

The foregoing was a study of 164 cases in which the results of the Standard Kahn Test and Treponema Pallidum Complement Fixation Test were correlated with clinical studies. Included were cases of early and late latent syphilis, congenital, cardiovascular, and neurosyphilis, and thirty-two false positive reactors.

The agreement of results in untreated syphilis was excellent and to a lesser degree in treated cases.

The disparity of results in false positive reactors emphasizes the need for an additional tool for investigating these cases. The TPCF was used for this purpose.

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TABLE III. EARLY LATENT SYPHILIS

Previous History	Number of Cases	Laboratory Results—Kahn vs. TPCF			
		Agreement		Disagreement	
		Number	Per Cent	Number	Per Cent
Treated	5	5	100.0	0	0.0
Untreated	3	3	100.0	0	0.0

TABLE IV. CONGENITAL SYPHILIS

Previous History	Number of Cases	Laboratory Results—Kahn vs. TPCF			
		Agreement		Disagreement	
		Number	Per Cent	Number	Per Cent
Treated	9	7	77.8	2*	22.2
Untreated	2	2	100.0	0	0.0

*Kahn reactive, TPCF nonreactive.

TABLE V. NEURO SYPHILIS

Previous History	Number of Cases	Laboratory Results—Kahn vs. TPCF			
		Agreement		Disagreement	
		Number	Per Cent	Number	Per Cent
Treated	3	2	66.7	1*	33.3
Untreated	1	1	100.0	0	0.0

*Kahn reactive, TPCF nonreactive.

TABLE VI. CARDIOVASCULAR SYPHILIS

Previous History	Number of Cases	Laboratory Results—Kahn vs. TPCF			
		Agreement		Disagreement	
		Number	Per Cent	Number	Per Cent
Treated	1	1	100.0	0	0.0
Untreated	0	—	—	—	—

TABLE VII. BIOLOGICAL FALSE POSITIVE REACTORS

Previous History	Number of Cases	Laboratory Results—Kahn vs. TPCF			
		Agreement		Disagreement	
		Number	Per Cent	Number	Per Cent
Treated	0	—	—	—	—
Untreated	32	8*	25.0	24†	75.0

*Previously STS reactive, repeat tests, Kahn and TPCF nonreactive.
†Kahn reactive, TPCF nonreactive.

Immediate Enjoyment

There has evolved in France a generation of French people with two immediate obsessions in life: (1) food and wine; (2) personal, immediate enjoyment. These two impelling desires have blanked out in France, at

least for the time being, the basic desires of past generations of Frenchmen—for home ownership and family living with its old values, and for self-made security.—National Education Program Letter.

Cholografin for Intravenous Cholangiography

By E. H. Lansing, M.D.
and W. W. Glas, M.D.

Eloise, Michigan

THIS is a report on the intravenous use of Cholografin Methylglucamine as a diagnostic aid for suspected diseases of the biliary tree. Cholografin Methylglucamine is a 52 per cent weight/volume solution of the methylglucamine salt of N,N'-adipyl-bis (3 amino-2,4,6-triiodobenzoic acid). Other investigators have reported on the 20 per cent solution of this drug.¹

Following intravenous administration of Cholografin Methylglucamine, it is normally rapidly excreted by the liver. Fifteen to thirty minutes later, it can be visualized by x-ray in the biliary tree. One to two hours later, the dye is concentrated in the gall bladder which is then visible by x-rays. This examination is easily carried out in conjunction with upper gastrointestinal barium studies.

The purpose of this study was to ascertain the value of this drug in diseases of the biliary system, and secondarily, its toxic reactions. When visualization of the biliary system failed, attempts were made to determine the reasons for failure. Eight liver biopsies were obtained.

Materials and Method

There were thirty-one patients in this study, twenty male and eleven female. All were hospitalized at Wayne County General Hospital. All patients had a complete history and physical examination prior to use of the drug. All of the patients presented signs and symptoms indicative of upper gastrointestinal or biliary tract disease. Liver function studies were carried out when indicated. Thirty-five 20 cc. ampules of Cholografin Methylglucamine were used. Four patients received a double dose of the dye.

When possible, all subjects were dehydrated slightly by restricting fluid intake during the night prior to administration of the dye. Benadryl 50 mgm. was given intravenously just prior to

the intravenous administration of the dye. In general a small No. 25 needle was used to administer the dye. Duration of injection of the dye was ten minutes in most instances. X-ray views of the right upper quadrant were obtained every ten minutes for one hour, then once each for the next two hours.

Results

Fifteen of the thirty-one patients showed visualization of the biliary tree or the gall bladder by x-ray. There was non-visualization in the remaining sixteen subjects.

The average serum bilirubin for the patients who showed visualization was 0.48 mgm. per cent. The range of values was from 0.3 to 0.8 mgm. per cent. These values are lower than those previously reported by Wise and O'Brien.² The average alkaline phosphatase for this group was 6.1 with a range of 2.4 to 8.2.

Five of the fifteen patients who showed visualization had bromsulphalein (BSP) studies; these five patients showed 1 to 18 per cent retention of the dye at forty-five minutes.

Three of these fifteen patients were subjected to liver biopsy *after* the dye had been used. The only consistent microscopic findings were slight periportal inflammation and infiltration of questionable significance.

In this group of fifteen patients, the prothrombin concentration varied from 51 to 100 per cent. Cephalin flocculation and thymol flocculation tests were normal. The serum proteins were normal in eleven patients, while three patients revealed a 1 to 1 albumin globulin ratio. There was a reversal of the AG ratio in one patient.

Three of the fifteen patients who showed visualization of the biliary tree showed stones in the gall bladder or common duct. The remaining twelve patients revealed excellent visualization of the biliary tree without abnormality.

From the Department of Surgery, Wayne County General Hospital, Eloise, Michigan.

Sixteen patients did not show visualization of the biliary tree or gall bladder. The average serum bilirubin in this group was 5.3 mgm. per cent with a range of 0.3 to 18.6 mgm. per cent. The average alkaline phosphatase was 14.6 with a range of 1.6 to 46.00. The one patient in this group who had a normal serum bilirubin did not visualize for reasons which are not apparent.

BSP studies in this group of sixteen varied from 10 to 41 per cent retention at forty-five minutes. The prothrombin concentration varied from 20 to 100 per cent of normal.

Five liver biopsies were obtained in the group that did not visualize. The diagnoses were as follows:

1. Changes compatible with extrahepatic biliary obstruction.
2. Metastatic adenocarcinoma of liver of pancreatic origin.
3. Cholangiolitic hepatitis or obstructive jaundice.
4. Cholangitis and cholangiolitis.
5. Biliary cirrhosis.

Toxic reactions were encountered in six of the thirty-one patients. These were as follows:

1. Nausea during administration—no benadryl—too rapid administration of dye.
2. Nausea and dizziness—had benadryl—too rapid administration of dye.
3. Nausea and salivation—had benadryl—solution given too rapidly.
4. Nausea and vomiting—no benadryl.

5. Nausea, flushing salivation—no benadryl with double dose.
6. Nausea, vomiting salivation—no benadryl, injection stopped after 10 cc. given.

The high incidence of nausea and vomiting in this series is probably due to too rapid administration of the dye. Several physicians reported injections completed in five minutes, erroneously believing that pretreatment with benadryl would protect the patient. Despite the rapid administration, no serious toxic reaction occurred.

Conclusions

1. Cholografin Methylglucamine was of diagnostic value in suspected lesions of the biliary tree: (a) when serum bilirubin levels were 0.8 mgm. per cent or less; (b) when BSP retention at forty-five minutes was 18 per cent or less.

2. Liver biopsies of patients who had received Cholografin Methylglucamine demonstrated no significant microscopic evidence of hepatic damage.

3. Toxic reactions, probably due to too rapid administration of the drug, occurred in seven of thirty-one patients. (a) Benadryl did not prevent the occurrence of toxic reactions due to too rapid administration of the dye.

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PILONIDAL DISEASE

(Continued from Page 1567)

by the development of a practical method for controlling the regional growth of hair and not by the development of more intricate surgical techniques.

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Michigan Clinical Institute

The Michigan Clinical Institute is twelve years old!

During these past twelve years, leading clinical teachers from the length and breadth of our country have been brought to Michigan to participate in one of the finest three day "refresher courses" available anywhere. Although basically conceived and continued for the doctor in general practice, the scope of subjects covered has been such as to attract all segments of our Society.

The endorsement of this annual event by the members of the Michigan State Medical Society can be attested by the yearly increase in attendance since its inception.

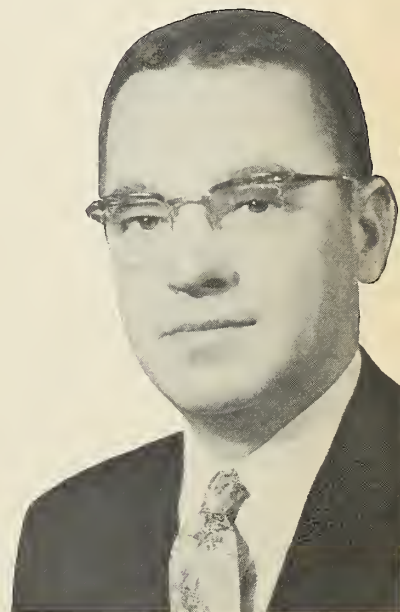
Plans for our Twelfth Annual Michigan Clinical Institute are complete. Again the "block system" will be utilized, thereby affording closely allied subjects to be presented in a particular portion of each day. Again, your Society has left no stone unturned in an effort to provide excellent and highly respected teachers of clinical medicine.

Each year brings forth advances in medicine, both in diagnostic procedures and in therapeutic "know-how," so that what we may have learned yesterday may be passé today. Hence, it behooves each of us, generalist or specialist, to attend and participate in this most excellent "refresher course." Our Society, through its most competent committees, have provided us in this Michigan Clinical Institute a device whereby in three days we can hear what it would take months to read.

In my two previous messages to you, I have emphasized the importance of the politico-socio-economic aspects of our present, and future, practice of medicine. We cannot forget them! However, we cannot forget that also we must keep abreast of the daily advances in the scientific and clinical aspects of Medicine! Through the proper admixture of all these facets of Medicine as it is today, we can continue to give to the American People, our patients, the finest medical care available on this earth.

See you at the Michigan Clinical Institute, Detroit, March 19, 20, 21, 1958!

President's



Message

Ges. H. Slagle.

President, Michigan State Medical Society

Editorial

HOLIDAY GREETINGS

THE JOURNAL of the Michigan State Medical Society, the Officers, the Council, the Publication Committee and the Editorial Staff wish all of our members and readers the most happy and satisfying of Christmas seasons. We bespeak for all of us a contented and successful New Year with the knowledge of most worthwhile accomplishments.

THE CLOSING YEAR, 1957

The Michigan State Medical Society may well look back over this passing year with a feeling of real accomplishment in the field of medicine. There has been much that has been new. We have made tremendous advances in the realm of heart surgery and in the realm of anesthesia. Many of our surgeons have bypassed the heart and entered that almost forbidden field of surgery. Others have used an artificial kidney. We have seen advances made in the prevention of polio which bid fair to a stamping out of that disease. We have had the reaction of a new influenza entity and have seen a special vaccine produced which promises successful treatment. THE JOURNAL has had its share in presenting much of this work to our readers and has been happy to do so.

There is also an economic phase in the practice of medicine to which we have devoted an unusual amount of attention. For nearly three decades, the Michigan State Medical Society, through its committees and the Council, has successfully proposed methods by which the lower income group of people and the average person himself is able to change the whole program of medical service from a very unsatisfactory set-up of "call a doctor—care for the patient—use a hospital, if necessary," with the patient and his family struggling for weeks or months or years to pay the bills. Those who could pay immediately were in the great minority.

We now have a pre-payment concept with a budgeting of the costs of medical care. This program, in which Michigan was very much a pioneer, was most successful as far as it went, but for about three years various committees have

been studying how to modernize and improve and extend the service. The year 1957 saw several committees completing reports and studies, saw the calling of an extraordinary session of our House of Delegates to consider emergency means. It became evident that more direct information must be obtained, so a Market Opinion Survey Study was authorized and accomplished. This material was presented at the regular session on September 23 and 24 and resulted in the adoption by the State Medical Society of a set of principles to govern the whole program of pre-payment medical care. The results of this opinion study were published in the November number of THE JOURNAL, also the complete set of principles, plus a shortened statement of those principles which was presented on a tipped-in tinted paper—four pages in the November JOURNAL.

By this action, the Michigan State Medical Society has pledged to its public a completely modernized and extendable program of pre-payment health insurance extending from a basic contract to a complete coverage where subscribers in groups may select the parts which meet their most intimate needs.

Indeed, this has been a most auspicious year.

THANK YOU

THE JOURNAL has continued its program of many years' standing of featuring in each issue some particular phase, committee, or other activity of the society. In January, THE JOURNAL was devoted to the Heart and the work of the Michigan Heart Association; in February, Genesee County and its Cancer Day; in March, Child Welfare; in April, the annual Cancer number, especially featuring cancer quackery; in May, Geriatrics, the aging patient; in June, for many years a special feature, Michigan Medical Service, with its annual reports, accomplishments and programs; July was devoted to the program and plans for the Annual Session; August featured the Upper Peninsula Medical Society—a very worthwhile development of the medical field in the Upper Peninsula and almost the stature of another State Medical Society; September featured Traffic Safety and Industrial Surgery; October, Men-

tal Health; November, the Physician as a Citizen—and very appropriately this number contained the report of our Market Opinion Survey with the program growing out of that study leading to the extension and increased function of Michigan Medical Service; December, as for years, announcements and programs for the next Michigan Clinical Institute.

For certain of these numbers, some of our members or committees have been asked to co-operate with the editor in assembling the material and sometimes in writing an editorial. This service has been accepted and the work well done. The editor wishes to express his appreciation to these volunteer workers. We wish especially to mention Herbert B. Elliott, M.D., Robert M. Heavenrich, M.D., the cancer co-ordinating committee, C. Allen Payne, M.D., Gabriel Steiner, M.D., David Sugar, M.D., Clarence I. Owen, M.D., T. P. Wickliffe, M.D., John R. Rodger, M.D., and Oliver McGillicuddy, M.D.

The editor wishes to express his appreciation and thanks particularly to the publication committee, to the various officers and councillors upon whom he has called for ideas, remarks, suggestions, who have co-operated in helping to establish an editorial policy expressing as nearly as we could what we believed to be the innermost feeling and sentiment of the Michigan State Medical Society.

MMS HISTORY AND FACTS

On November 30, 1939, Michigan Medical Service was incorporated. The incorporators were A. S. Brunk, M.D., Henry R. Carstens, M.D. (chosen chairman), Burton R. Corbus, M.D., L. Fernald Foster, M.D., Wilfrid Haughey, M.D., William A. Hyland, M.D., Henry A. Luce, M.D., Vernor M. Moore, M.D., Ralph H. Pino, M.D., Phillip A. Riley, M.D., P. R. Urmston, M.D., Mrs. Dora H. Stockman of the State Legislature, and Mr. William Burns, Executive Secretary of the Michigan State Medical Society. Upon motion, the following were also elected directors: H. H. Cummings, M.D., R. H. Holmes, M.D., O. D. Stryker, M.D., and Mr. William J. Norton, a financier, to be Treasurer. There have been complaints over the years that this Board of Directors was too self-determined and needed new blood. It is interesting that of the original board, four are still serving—two with no interruption, Wilfrid Haughey and Phillip Riley. One is serv-

ing with a six months' interruption—William A. Hyland, and one is serving with a two-year interruption—L. Fernald Foster. For a while, the Board had seventeen members, increased to twenty-five, then authorized thirty-five.

During the years, there have been ninety-one members, fifty-one of whom were doctors of medicine representing the profession, nine doctors of medicine representing the Hospital Service, eleven hospital administrators representing Hospital Service, and twenty persons representing the public. In 1942 and 1943, arrangements were made whereby the Michigan State Medical Society nominated membership to the Michigan Hospital Service Board and the Michigan Hospital nominated members to our Board, there being six representing each. The years of service are impressive, Phil Riley and Wilfrid Haughey—eighteen years, William Hyland—seventeen years and six months, E. I. Carr and John Reid, Michigan Commissioner of Labor—seventeen years, L. Fernald Foster—sixteen years, Robert H. Baker and Robert L. Novy—fourteen years, Ellery Oaks—thirteen years, Carleton Fox, D.D.S. and E. D. Sladek—eleven years, A. C. Kerlikowski—ten years. The group just mentioned contains only two representing the public—not doctors of medicine. Seven doctors of medicine have served nine years—three full terms. Three non-doctors served eight years. Three doctors and four non-doctors served seven years. Eight, of which three were non-doctors, served six years. Three, one being a doctor, served five years. Five people have served four years, fourteen have served three years, ten have served two years, fourteen have served one year, and five have served less than a year. Eight have died during their term of service, and three have resigned to enter the military service. The Board now numbers twenty-two doctors representing the medical profession, three representing the hospitals, three administrators representing the hospitals, and five representing the public—a total of thirty-three.

WITH FIRM AND REGULAR STEP

"It happened on a Thursday evening, October 30, 1947. The scene was the living room in the Grand Rapids home of Dr. and Mrs. A. B. Smith."

This editorial is being written on a Thursday morning, exactly ten years later and we are quoting from THE JOURNAL of the Michigan State

Medical Society, Volume 50, pages 632 to 661, June, 1951. Dr. Smith, at that time Councillor of the Michigan State Medical Society, had invited to his house at Senator Arthur Vandenberg's suggestion, Dr. Wilfrid Haughey, Vice President of Michigan Medical Service; Dr. L. Fernald Foster, Secretary of the Michigan State Medical Society; Mr. Wm. J. Burns, Executive Director, Michigan State Medical Society; and Jay C. Ketchum, Executive Vice President of Michigan Medical Service. The Senator wished authoritative information and requested to meet those best informed and able to answer his questions. It was a memorable occasion and at the close he said:

"You have done something in Michigan that you didn't know you were doing. You have established a public trust. Your Michigan Medical Service and Hospital Service (Blue Cross) are a public trust. You didn't intend to do it so and you didn't know that you had done it, but you have. You have taken \$50,000,000 or so of the people's money and have used it for the benefit of the people. As such you are the trustees of the public trust."

In discussing the continuing demands upon the government for relief from the increased costs of medical care, Senator Vandenberg said:

"The medical profession is eternally, locally and nationally, opposing something that was proposed in Washington. You have approached the matter from the wrong direction. The way to defeat a program is not so much to oppose it as to make it unnecessary—to propose a substitute that is better, works easier and does not disrupt existing economy. The medical profession of Michigan has done one of the most stupendous pieces of socio-economic study that has ever been done without the aid of government or help of substantial subsidy. It has been done by private effort and by amazingly little capital.

"The medical profession of Michigan has shown that the socio-economic needs of her people can be solved by the very men most able and best equipped to understand the situation, who know the need and the remedy.

"You in Michigan have the answer to socialized medicine, have proved it to a quarter of the population of the State, but while doing a magnificent job, have done it quietly and undercover as it were. You have been afraid of publicity, the one thing you must have if you are to avoid socialized medicine. You would be amazed at how easy socialized medicine could be put across, even with all the vast sums spent in opposition. The medical profession has muffed the ball.

"As trustees of a great public trust, the profession must take the public into its confidence and make periodic reports. Such publicity is a public duty, not the advertising of an appendix operation or the merits

of Dr. Jones. You must discharge that duty so efficiently that every individual will know the results in spite of himself. Such publicity will effectively forestall any socialized medicine plan that may be proposed."

The Senator said finally that what he wants as part of his fight to prevent socialized medicine is glaring publicity of the things we in Michigan have done so unbelievably well. (Editorial, *THE JOURNAL* of the Michigan State Medical Society, December, 1947, page 1412).

During the years, we have referred to that meeting and the Senator's words many times, proud to have been consulted and proud to feel that the Society had carried on that trust to which he called attention. The very latest financial report shows that Michigan Medical Service has paid for services to our subscribers, medical and surgical services, over \$250,000,000. The \$50,000,000 referred to by the Senator was for complete hospital and medical services at that time, but the figures just quoted are for the Blue Shield program alone. We are happy in our memory of the Senator and in our ability to present this ten-year report of a continuing task and trusteeship which has gone beyond all dreams and expectations.

ELECTION OF OFFICERS

President-Elect



G. B. SALTONSTALL

Gilbert B. Saltonstall, M.D., was born in Cheboygan, Michigan, in 1906, the son of Brayton and Annie Saltonstall. In 1912, the family moved to Charlevoix, where Gilbert graduated from the Charlevoix High School as valedictorian in 1926. He entered the University of Michigan the same year and graduated with the degree of Bachelor of Science in 1931, and the Degree of Doctor of Medicine in 1933. In college, he belonged to the following fraternities: Phi Mu Alpha, Alpha Epsilon U, Kappa Kappa Psi, Kappa Beta Phi, Alpha Kappa Kappa-medical. His college activities included the Varsity Glee Club (four years), University of Michigan Band (five years), Michigan Union and Midnight Sons Quartet. His internship was served at Grace Hospital in 1933-1934.

He entered general practice in medicine and surgery in Charlevoix in 1934. He was Chief of Staff in the Charlevoix hospital from 1949 to 1956. He has been a member of the Northern Michigan Medical Society since 1934, serving as Secretary eleven years, as President, and as Delegate to the Michigan State Medical Society House of Delegates. He was Councillor of the Ninth District from 1950 to 1957, Chairman of the Publications Committee and member of the Executive Committee, 1954-1957. He holds a Michigan State Medical Society Fellowship in post-graduate education (1942), membership in the American Academy of General Practice (1949), and in the Michigan State Medical Society from 1934 to date. He is also a member of the World Medical Association and the Elks. He was married to Charlotte Mathauer in 1934; they have two daughters. Dr. Saltonstall was re-elected to the Council at the September, 1957 meeting, after which he was nominated for the position of President-Elect, and was elected to that post. He thereupon resigned as Councillor of the Ninth District.

ELECTIONS TO THE COUNCIL

Seventh District



J. F. BEER

Joseph F. Beer, M.D., of St. Clair, was born in 1912, graduated from the University of Detroit with a Bachelor of Science degree in 1933, Wayne University College of Medicine in 1938, and was licensed to practice medicine in 1938. He is a member of the Michigan State Medical Society Public Relations Committee, St. Clair County Medical Society,

American Medical Association, International College of Surgeons, Industrial Medical Association, World Medical Association, and American Academy of General Practice. He is medical examiner for the Preschool Clinic and School Clinic, member of the American Red Cross Operation Mercy, Assistant Medical Officer of the United States Public Health Service, and served in the United States Air Forces Medical Corps from 1942 to 1946. He is on the Senior Courtesy Staff, Port Huron Hospital, and the Mercy Hospital in Port Huron; also the Senior Surgical Staff of St. Clair

Community Hospital. He is a member of the Board of Directors of Michigan Medical Service and Chairman of the Medical Advisory Committee of that organization.

Eighth District



E. S. OLDHAM

Earle S. Oldham, M.D., was born May 24, 1908, at Petoskey, Michigan. He graduated from the Southwestern High School, Detroit, in 1926, from the University of Michigan with an A.B. degree in 1931, from Wayne University College of Medicine with a B.M. degree in 1936, and M.D. in 1937.

He interned at Evangelical Deaconess Hospital in Detroit in 1936-37 and held a residency in the same hospital in 1937-38. He has been in private practice in Breckenridge since 1938. He served in the Navy Medical Corps from 1942 to 1946 in the South Pacific, and has been a reserve officer since that time.

Dr. Oldham was married in 1938 to Mildred J. Pelz; they have no children. He is a Past President of Rotary and of Gratiot-Isabella-Clare County Medical Society. He is a member of the Michigan State Medical Society, American Academy of General Practice, Nu Sigma Nu, and Alpha Kappa Delta.

Ninth District



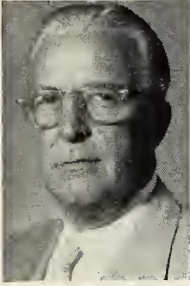
D. G. PIKE

Donald G. Pike, M.D., was born in Detroit, Michigan, in 1915. He graduated from Wayne State University Medical School in 1939 and was in the United States Navy Medical Corps during World War II from 1942 to 1946. He is at present a Commander in the Medical Corps Active Reserve USNR.

From 1947 until the present, he has been in general practice in Traverse City. He served as Secretary of the Grand Traverse-Leelenaw-Benzie County Medical Society from 1948 to 1955; has been a delegate to the Michigan State Medical Society House of Delegates from 1949 to 1957.

He is a Past President of James Decker Munson Hospital and a Past President of the Traverse City Lions Club.

Tenth District



O. J. JOHNSON

Orlen J. Johnson, M.D., Bay City, is a 1930 graduate of the University of Michigan Medical School. He interned at St. Luke's Hospital in Cleveland and practiced in Marshall, Michigan, from 1931 to 1938. Following that, he received his Master of Public Health Degree at Harvard School of Public Health. He served with the Council on Industrial Health of the AMA, and did a surgical residency at St. Luke's Hospital in Chicago. After that he established his practice in Bay City and has been there since that time.

He has been Chairman of the Industrial Health Committee of the Michigan State Medical Society since 1955, and an alternate delegate to the American Medical Association for the Michigan State Medical Society since 1953. He has served in the MSMS House of Delegates since 1949.

He was Chief of Staff of the Bay City General Hospital from 1953 to 1955. He served as Chairman of the Executive Committee of the Bay-Arenac-Iosco County Medical Society, and has been Chairman of the Public Relations Committee of the Society from 1953 until the present time.

OTHER ELECTIONS

The delegates to the AMA House of Delegates, all of whom were re-elected, are: Wm. A. Hyland, M.D., Grand Rapids; J. S. DeTar, M.D., Milan; and C. I. Owen, M.D., Detroit. The alternate delegates, who were also re-elected, are: W. W. Babcock, M.D., Detroit; E. S. Sladek, M.D., Traverse City; O. J. Johnson, M.D., Bay City. The Speaker of the House, K. H. Johnson, M.D., Lansing, and the Vice Speaker, J. J. Lightbody, M.D., Detroit, were re-elected.

At the organizational meeting of The Council, D. Bruce Wiley, M.D., Utica, was re-elected Chairman and Winfield B. Harm, M.D., Detroit, was re-elected Vice Chairman. Wm. M. LeFevre, M.D., Muskegon, was re-elected Chairman of the

County Secretaries Committee; B. M. Harris, M.D., Ypsilanti, was elected Chairman of the Publications Committee, and Ralph W. Shook, M.D., Kalamazoo, was re-elected Chairman of the Finance Committee.

At the meeting of the Corporation of Michigan Medical Service, the following were elected to membership on the Board of Directors: E. C. Baumgarten, M.D., Detroit, (re-elected); Clyde Knapp Hasley, M.D., Detroit (re-elected); Howard W. McGee, General Assistant Comptroller, General Motors Corporation, Detroit, representing the public; Roger B. Nelson, M.D., Assistant Director of University Hospital, Ann Arbor, representing the Michigan Hospital Association; John Reid, State Commissioner of Health, Lansing (re-elected); Walter Z. Rundles, M.D., Flint, representing the profession; Arch Walls, M.D., Detroit (re-elected); D. Bruce Wiley, M.D., Utica (re-elected).

PROLAPSE OF GASTRIC MUCOSA

(Continued from Page 1578)

15. Rubin, J. S.: Prolapse of polypoid gastric mucosa into the duodenum with malignant change. *Radiology*, 38:362, 1942.
16. Ellison, A. B. C., and Squire E. W.: Prolapse of gastric mucosa into the duodenum. *West Virginia M.J.*, 49:237, 1949.
17. Backus, J. L.: *Gastroenterology*, Vol. I, p. 762. Philadelphia: W. B. Saunders Co.
18. Stillman, Sidney: Prolapse of the gastric mucosa into the duodenum; report of 8 cases. *Florida M. A. J.*, 39:25, 1952-53.
19. Arnold, W.: *Texas State J. Med.*, 48:758, 1952.
20. Blain, A., III, and Hamburger, S. W.: Refractory symptomatic prolapse of gastric mucosa relieved by gastrectomy. *Ann. Surg.*, 141:77, 1955.
21. Zollinger, Robert M.: A lecture delivered before the surgical staff of the University of Michigan in 1954 on the nutritional status and on the choice of the operation on the stomach.

More than two-thirds of all industrial injuries occur in businesses with fewer than 100 workers. Small business is thus paying most of the estimated national annual cost of \$2.5 billion for occupational injuries.—EDWARD T. DICKENSON, New York State Commerce Commissioner, in *Industrial Medicine and Surgery*, November, 1957.

Michigan Clinical Institute

Refresher Course

Sheraton-Cadillac Hotel, Detroit

WEDNESDAY-THURSDAY-FRIDAY, MARCH 19-20-21, 1958

C. E. Umphrey, M.D., Detroit
General Chairman

Information

- **THEME**—"Yesterday's Hopeless—Now Curable!"
- **HEADQUARTERS**—Sheraton-Cadillac Hotel; Assemblies and Exhibits on Fourth Floor; Press Room on Fifth Floor (Suite 500).
- **REGISTER**—Top of stairs—Fifth Floor—as soon as you arrive.

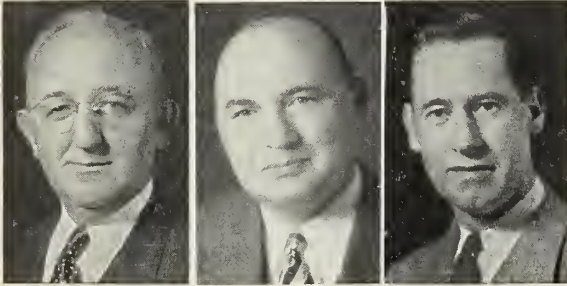
Hours: Tuesday, March 18—1:00 to 5:00 p.m.
Wednesday, March 19—7:30 a.m. to 5:15 p.m.
Thursday, March 20—8:15 a.m. to 5:15 p.m.
Friday, March 21—8:15 a.m. to 3:30 p.m.

- **NO REGISTRATION FEE** for Members of MSMS and other State Medical Associations, AMA, and Canadian Medical Association.
- **ADMISSION BY BADGE ONLY** to all Assemblies and the Exhibition. Please present your MSMS or other State Medical Association, AMA, or CMA Membership Card to expedite registration.
- **GUESTS**—Members of any state medical association, AMA, or CMA members from any province of Canada and physicians of the Army, Navy, and U. S. Public Health Service are invited to attend as guests. No registration fee. Please present credentials at the Registration Desk.
Bona fide doctors of medicine who are associate or probationary members of Michigan county medical societies or who are serving as residents or interns, if vouched for by the president or secretary of the county medical society in whose jurisdiction they practice, will be registered as guests with no registration fee. Please present credentials at the Registration Desk.
- **MICHIGAN DOCTORS OF MEDICINE** in practice but who are not members of MSMS, if listed in the American Medical Association Directory, may register as guests upon payment of \$25.00. This amount will be credited to them toward dues in the Michigan State Medical Society **FOR 1958 ONLY**, provided they subsequently are voted into membership by the county medical society in whose jurisdiction they practice.
- **TELEPHONE SERVICE**—Local and long distance telephone service will be available in the Sheraton-Cadillac Hotel, fourth floor. In case of emergency, physicians will be paged from the meetings by an announcement on the screen. Call the Sheraton-Cadillac Hotel, Detroit, Woodward 1-8000, and ask

for the Michigan Clinical Institute extensions on the Fourth Floor.

- **CHECKROOM** is available in the Sheraton-Cadillac Hotel, Fourth Floor, next to Grand Ballroom.
- **GUEST ESSAYISTS** are very respectfully requested not to change time of their lecture with another speaker without the approval of the Committee on Arrangements. This request is made in order to avoid confusion and disappointment on the part of members of the audience.
- **PAPERS WILL BEGIN AND END ON TIME**—Nothing makes a scientific meeting more attractive than by-the-clock promptness and regularity; therefore, all meetings and panels will open on time, all speakers will be required to begin their talks exactly on time and to close exactly on time, in accordance with the schedule in the Program. All who attend the Institute are respectfully requested to assist in attaining this end by noting the schedule carefully and by being in attendance accordingly, in order not to miss that portion of the program of greatest interest.
- **TUESDAY EVENING, March 18**—Public Telecast of a Vascular Operation, sponsored by Smith, Kline & French Laboratories, Philadelphia.
- **TECHNICAL EXHIBITS**—Seventy-four interesting and instructive displays will open daily at 8:15 a.m. and close at 5:15 p.m., except on Friday when the exhibit breaks up at 3:30 p.m. Frequent intermissions to view the exhibits have been arranged daily before, during and after the assemblies.
- **THERE IS SOMETHING** of interest or education in the large exhibit of technical displays. **SAVE AN ORDER FOR THE EXHIBITOR AT THE MICHIGAN CLINICAL INSTITUTE.**
- **POSTGRADUATE CREDITS** are given to every MSMS member who attends the Michigan Clinical Institute. Notify J. M. Sheldon, M.D., Chairman, MSMS Committee on Postgraduate Medical Education, 1313 E. Ann St., Ann Arbor, Michigan.
- **PARKING**—Do not park on Detroit's streets. Inside parking at a convenient distance from the Sheraton-Cadillac Hotel is available at the DAC Garage, 1754 Randolph, the Grand Circus Garage, 1776 Randolph, and the Book Tower Garage, 333 State.

- **INFORMATION OF PRACTICAL VALUE IN DAILY PRACTICE** will be found at the Michigan Clinical Institute. All subjects on the Institute Program are applicable to clinical medicine. They stress diagnosis and treatment, usable in everyday practice.
- **PRESS RELATIONS COMMITTEE** for the 1958 Michigan Clinical Institute: A. B. Gwinn, M.D., *Chairman*, Hastings; H. F. Dibble, M.D., Detroit; Ralph W. Shook, M.D., Kalamazoo; C. L. Weston, M.D., Owosso, and J. J. Lightbody, M.D., Detroit.



C. E. UMPHREY, M.D. B. E. BRUSH, M.D. K. H. JOHNSON, M.D.

- **C. E. UMPHREY, M.D.**, Detroit, is General Chairman of Arrangements for the 1958 Michigan Clinical Institute.
- **B. E. BRUSH, M.D.**, Detroit, is Chairman of the Program Committee for the 1958 Michigan Clinical Institute.
- **K. H. JOHNSON, M.D.**, Lansing, is Chairman of Committee on Arrangements for the Testimonial Luncheon Honoring Presidents of National Medical Organizations on Thursday, March 20.
- **WAYNE STATE UNIVERSITY COLLEGE OF MEDICINE ALUMNI ASSOCIATION** will maintain headquarters in the Sheraton-Cadillac Hotel during the Michigan Clinical Institute. All alumni, their guests, and friends of Wayne State are cordially invited to visit the headquarters. The room location will be posted at the registration desk.

MUCH THAT IS NEW AND INTERESTING WILL BE FOUND IN THE MCI EXHIBIT

THE "BLOCK SYSTEM"

at the

1958 MICHIGAN CLINICAL INSTITUTE

Surgery — Cancer Control — Aging — Wednesday morning, March 19

Trauma—Wednesday afternoon, March 19

Heart and Rheumatic Fever—Thursday morning, March 20

Steroids panel—Thursday afternoon, March 20

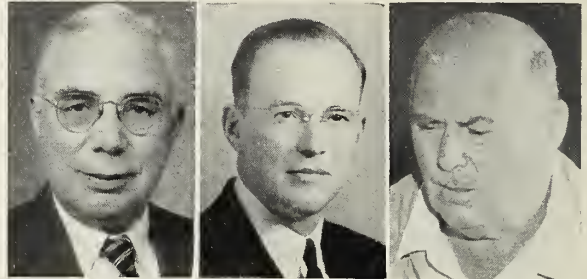
Obstetrics-Gynecology-Pediatrics — Friday morning, March 21

"Yesterday's Hopeless—Now Curable!"—Friday Afternoon, March 21

THREE DISCUSSION CONFERENCES

These quiz periods will be held Wednesday-Thursday-Friday, March 19-20-21, Grand Ballroom, Sheraton-Cadillac Hotel, 5:00 to 5:30 p.m. with all the guest speakers of the day invited to appear on the platform.

An opportunity is thus provided to ask questions concerning the presentations of the guest essayists, or to discuss one of your interesting cases with them.



CARL E. BADGLEY,
M.D.
Ann Arbor
Leader—Wednesday,
March 19

GORDON B. MYERS,
M.D.
Detroit
Leader—Thursday,
March 20

PAUL DE KRUIF,
Ph.D.
Holland
Leader—Friday,
March 21

MEETINGS OF SPECIAL SOCIETIES ALUMNI AND AUXILIARY GROUPS

(Details to be announced in January issue)

Tuesday, March 18, 1958

1. Michigan Branch, American Academy of Pediatrics is planning an all-day meeting in Ann Arbor.
2. Michigan Chapter, American College of Surgeons will hold an all-day Annual Meeting followed by reception and dinner.

Wednesday, March 19, 1958

3. Michigan Regional Committee on Trauma, American College of Surgeons is scheduling a luncheon-meeting.
4. Cancer Control Luncheon honoring Frederick A. Coller, M.D., Ann Arbor, and Laurance W. Kin-sell, M.D., Oakland, California.
5. Symposium on the Phrenotropic Drugs, Grand Ballroom, Sheraton-Cadillac Hotel, 8:00 to 10:00 p.m. Sponsor: The Schering Corporation, Bloom-field, N. J.

Thursday, March 20, 1958

6. Michigan Heart Association will hold its annual Members Banquet and Meeting.
7. Michigan Protologic Society will hold its annual business meeting and dinner.
8. Operating Room Nurses Institute is scheduled for Thursday and Friday, March 20-21.
9. Testimonial Luncheon honoring Michigan's Presidents of National Medical Organizations.
10. Michigan Society of Neurology and Psychiatry and Michigan District Branch of the American Psychiatric Association will hold a reception and dinner followed by a scientific meeting.

Friday, March 21, 1958

11. Michigan Heart Association will hold a board meeting.
12. Conference for Residents, Interns and Senior Medical Students, 2:00 to 6:30 p.m.
13. Testimonial Luncheon honoring the pharmaceutical lecturer, sponsored by the Michigan State Pharmaceutical Association.

MICHIGAN CLINICAL INSTITUTE

14. **Michigan Branch, American Academy of Pediatrics** will hold a testimonial luncheon.

ACKNOWLEDGMENTS—The Michigan Clinical Institute gratefully acknowledges the co-operation of:

1. The Michigan Regional Committee on Trauma, American College of Surgeons, sponsor of the trauma program (four speakers) on Wednesday, March 19.
2. The Michigan Heart Association, sponsor of the heart and rheumatic fever program (seven speakers) on Thursday, March 20.
3. The Michigan Foundation for Medical and Health Education, Inc., sponsor of Laurence W. Kinsell, M.D., of Oakland, California, the Foundation Lecturer.
4. The Michigan Cancer Co-ordinating Committee, sponsor of G. N. Papanicolaou, M.D., of New York City, the MCCC Lecturer.
5. Smith, Kline and French Laboratories, Philadelphia, for sponsorship of the closed circuit color television program beamed to the MCI meeting room; and Detroit's Henry Ford Hospital and its medical staff for co-operation in arranging and producing the three-days TV scientific presentations.
6. The American Cyanamid Company, Surgical Products Division, Danbury, Conn., for sponsorship of the color motion pictures shown during the MCI in the Normandie Room, Sheraton-Cadillac Hotel.
7. Schering Corporation of Bloomfield, New Jersey, for sponsoring the Wednesday evening Symposium on the Phrenotropic Drugs.
8. Mead Johnson and Co. of Evansville, Indiana, and Michigan State Medical Society—co-sponsors of the Conference for Residents, Interns and Senior Medical Students.
9. The Michigan State Pharmaceutical Association for sponsoring the testimonial luncheon honoring the Pharmaceutical Lecturer.
10. Michigan Medical Service, for contributing notepads for use of MCI registrants.

COMMITTEE ON ARRANGEMENTS

Representing Michigan State Medical Society

C. E. Umphrey, M.D., Detroit, General Chairman
G. W. Slagle, M.D., Battle Creek, President, MSMS
Arch Walls, M.D., Detroit, Immediate Past President, MSMS

L. Fernald Foster, M.D., Detroit, Secretary, MSMS

Representing University of Michigan School of Medicine and University of Michigan Department of Post-graduate Medicine

M. R. Abell, M.D., Ann Arbor
B. D. Graham, M.D., Ann Arbor
H. A. Towsley, M.D., Ann Arbor
A. B. Vial, M.D., Ann Arbor

Representing Wayne County Medical Society and Wayne University College of Medicine

M. L. Lichter, M.D., Melvindale
J. W. Sigler, M.D., Detroit
M. M. Taylor, M.D., Grosse Pointe
R. K. Whiteley, M.D., Detroit

Representing Out-State Practitioners, Members of MSMS

E. J. Kulinski, M.D., Bay City
F. H. Lindenfeld, M.D., Niles
E. A. Oakes, M.D., Manistee
E. S. Oldham, M.D., Breckenridge
D. G. Pike, M.D., Traverse City
S. B. Winslow, M.D., Battle Creek
P. S. Sloan, M.D., Houghton
Charles Ten Houten, M.D., Paw Paw

Representing Michigan Department of Health and Michigan Health Officers Association

A. E. Heustis, M.D., Lansing
J. D. Monroe, M.D., Pontiac

Representing Michigan Foundation for Medical and Health Education

E. I. Carr, M.D., Lansing

Representing Michigan Heart Association

F. D. Johnston, M.D., Ann Arbor

Representing American College of Surgeons Regional Committee on Trauma

H. M. Smathers, M.D., Detroit

Representing Michigan Cancer Co-ordinating Committee

H. M. Nelson, M.D., Detroit

COMMITTEE ON PROGRAM

B. E. Brush, M.D., Detroit, Chairman
H. A. Furlong, M.D., Pontiac
W. M. LeFevre, M.D., Muskegon
W. S. Reveno, M.D., Detroit
H. A. Towsley, M.D., Ann Arbor
Paul deKruif, Ph.D., Advisor, Holland

COMMITTEE ON COLOR TELEVISION PROGRAM

B. E. Brush, M.D., Detroit, Chairman
Mr. R. A. Reath, Philadelphia, Pa.
J. W. Logie, M.D., Grand Rapids
J. L. Ponka, M.D., Detroit
E. L. Quinn, M.D., Detroit
H. A. Towsley, M.D., Ann Arbor
J. M. Wellman, M.D., Lansing

HOTEL RESERVATIONS

MICHIGAN CLINICAL INSTITUTE

Detroit, March 19-20-21, 1958

The reservation blank below is for your convenience in making your hotel reservation in Detroit. Please send your application to B. Van De Keere, Assistant Sales Manager, Sheraton-Cadillac Hotel, Detroit 31, Michigan. Mailing your application now will be of material assistance in securing hotel accommodations.

As very few singles are available, registrants are requested to co-operate with the Committee on Hotels by sharing a room with another registrant, when convenient.

Committee on Hotels

Michigan Clinical Institute

c/o Sheraton-Cadillac Hotel

Detroit 31, Michigan

Attention: B. Van De Keere

Please make hotel reservation(s) as indicated below:

.....Single Room(s)

.....Double Room(s) for.....persons

.....Twin-Bedded Room(s) for.....persons

Arriving Marchhour.....A.M.....P.M.....

Leaving Marchhour.....A.M.....P.M.....

Hotel of First Choice:

Second Choice:

Names and addresses of all applicants including person making reservation:

Name	Address	City	State
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Date Signature

Address City

Michigan Clinical Institute, 1958



C. E. UMPHREY, M.D.

C. E. UMPHREY, M.D., Detroit, General Chairman of Arrangements for the 1958 Michigan Clinical Institute, Detroit. Doctor Umphrey is a Past President of the Michigan State Medical Society

Tentative Program

WEDNESDAY, MARCH 19, 1958

A.M.

7:30 REGISTRATION — Top of stairs, Fifth Floor, Sheraton-Cadillac Hotel

8:15 EXHIBITS OPEN—Fourth Floor, Sheraton-Cadillac Hotel

FIRST ASSEMBLY

Grand Ballroom, Sheraton-Cadillac Hotel

Chairman: H. K. RANSOM, M.D., Ann Arbor

Secretary: N. J. HERSHEY, M.D., Niles

8:20 WELCOME

G. W. SLAGLE, M.D., Battle Creek
President, Michigan State Medical Society

L. J. BAILEY, M.D., Detroit
President, Wayne County Medical Society

SURGERY-CANCER CONTROL

8:30 "Open Heart Surgery"

HENRY T. BAHNSON, M.D., Baltimore, Maryland
Associate Professor of Surgery, Johns Hopkins Hospital

9:00 "Relationship of Colonic Polyps to Cancer of the Colon"

FREDERICK A. COLLER, M.D., Ann Arbor

9:20 "The Diagnosis and Management of Intestinal Obstruction in the Newborn and Infant"

CLIFFORD D. BENSON, M.D., Detroit

Associate Professor of Surgery, Wayne State University College of Medicine; Associate Chief of Surgery, Children's Hospital; Surgeon, Harper Hospital

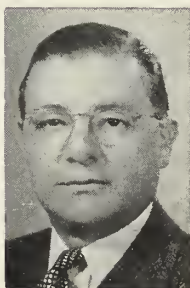
Intestinal Obstruction in the newborn and infants still comprises one of the most common surgical lesions. Early and accurate diagnosis is still probably the most important factor in the survival of these infants. The diagnostic features of the important lesions will be discussed and the present-day management will be emphasized. During the past five years the technical aspects of managing intestinal obstruction in the newborn and infant has brought forth much progress and this is reflected in a decreased morbidity and mortality rate. The lesions to be discussed are: Atresias at the various levels of the gastro-intestinal tract, stenosis, malrotation and other congenital abnormalities of the gastro-intestinal tract, including megacolon or Hirschsprung's disease.



H. T. BAHNSON, M.D.



F. A. COLLER, M.D.



C. D. BENSON, M.D.

9:40 "The Blues in Medicine"

L. FERNALD FOSTER, PH.B., M.D., Detroit
Secretary, Michigan State Medical Society; President, and Medical Executive Administrator, Michigan Medical Service
 In résumé, it should encompass the story of prepayment insurance—The Past—The Challenge of the Twenties and Thirties—The Present and—The Future.
 The basic thought is the objective of providing all the people with the best medical care at a price their economy will permit and to achieve this objective through the operation of the American Free Enterprise System.



L. F. FOSTER, M.D.

10:00 INTERMISSION TO VIEW EXHIBITS

11:00 THE MICHIGAN FOUNDATION FOR MEDICAL AND HEALTH EDUCATION LECTURE

"Aging—Decay or One Hoss Shay"

LAURANCE W. KINSELL, M.D., Oakland, California
Director, Institute for Metabolic Research, Highland Alameda County Hospital

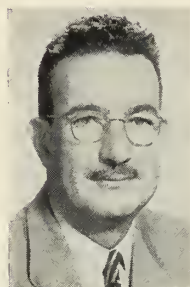
Birth, puberty, climacteric, death. All of these are manifestations of the cosmic time clock in each individual life span.

Research in the field of geriatrics and gerontology must be directed toward understanding of this time clock mechanism (the *physiology* of aging), as well as toward understanding and prevention of the *pathology* of aging, with particular reference to atherosclerotic cerebral vascular disease.

Indefinite postponement of death would seem to be neither feasible nor desirable. The absence of one living human past the age of 150 attests to the unfeasibility. A consideration of the simplest sort of arithmetic attests to the undesirability. Within a few generations of the beginning of unlimited survival, all the untenanted space on this globe would have disappeared.

No better example of the "one hoss shay approach" to living and dying has been afforded us in our generation than by Justice Oliver Wendell Holmes, a man witty, active, interested in all about him, almost to the day of his death. No sadder manifestation of the "decay" approach to aging confronts us than a respected pater familias, who, as the result of progressive atherosclerosis of the cerebral vessels, becomes a trial to himself and to all about him—a doddering, forgetful caricature of his former self.

Is prevention of senescence feasible and desirable? There can be only a positive answer to the desirability. If, as seems most probable, impaired arterial blood supply is the major factor responsible for senility, prevention is feasible and may well be completely in hand before the passing of a decade. The facts and some of the theory relating to this will be discussed with you.



L. W. KINSELL, M.D.

11:30 THE MICHIGAN CANCER CO-ORDINATING COMMITTEE LECTURE

"Cytology and the General Practitioner—What the General Practitioner Can Gain from the New Method"

CYRUS C. ERICKSON, M.D., Memphis, Tennessee

12:00 End of First Assembly

Luncheon

P.M.

1:00 COLOR TELEVISION PROGRAM, beamed to the Grand Ballroom, Sheraton-Cadillac Hotel through the co-operation of the staff of Henry Ford Hospital, Detroit and Smith, Kline and French Laboratories of Philadelphia

2:30 End of Television Program

2:30 INTERMISSION TO VIEW EXHIBITS

SECOND ASSEMBLY

Grand Ballroom, Sheraton-Cadillac Hotel

Chairman: E. J. LAURETTI, M.D., Muskegon

Secretary: A. H. ULMER, M.D., Port Huron

TRAUMA

3:20 "Present Status of Intervertebral Disc Surgery"

ALEXANDER T. AITKEN, M.D., Brookline, Massachusetts

3:50 "Injury Reduction by Identification of the Accident Prone Worker"

KERMIT T. JOHNSTONE, M.D., Saginaw
Medical Director, Saginaw Plant, Central Foundry Division, General Motors Corporation

A significant reduction of 33.2 per cent has been achieved between 1954 and 1957 in a malleable iron foundry.

This has followed the identification of certain individuals as "Accident Prone." This is accomplished by comparing the



K. T. JOHNSTONE, M.D.



W. W. GLAS, M.D.



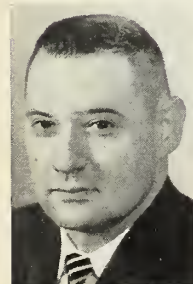
P. A. WADE, M.D.



R. W. WAGGONER, M.D.



F. J. BRACELANO, M.D.



E. F. DOMINO, M.D.

number of injuries each employee experiences in a two-month period with the number of expectable on a basis of plant-wide performance.

The men that exceed this are interviewed at the time to determine the underlying causes. These interviews have: (1) brought to light unsuspected job hazards which are correctable, and (2) indicated certain individuals that have personality problems.

In some cases, the man's attitude toward his work can be improved; and in others, a more suitable job assignment can be arranged.

4:10 "Postoperative Care of the Multiple-Injury Patient"

WAYNE W. GLAS, M.D., Eloise

Director of Surgery, Wayne County General Hospital, Eloise; Instructor in Surgery, University Hospital, Ann Arbor; Consultant to Veterans Administration Hospital, Ann Arbor; Surgical Consultant at Oak Ridge Institute of Nuclear Studies, Oakridge, Tenn.

4:30 "Fractures of the Femur"

PRESTON A. WADE, M.D., New York City

Professor of Clinical Surgery, Cornell University Medical College; Attending Surgeon, New York Hospital; Chairman, Fracture Clinic (combined) New York Hospital-Hospital Special Surgery; Chairman, Committee on Trauma, American College of Surgeons

5:00 End of Second Assembly

5:00 DISCUSSION CONFERENCE

Grand Ballroom, Sheraton-Cadillac Hotel

Leader: CARL E. BADGLEY, M.D., Ann Arbor

Participants: All guest essayists of the day (indicated above) will participate.

5:30 End of Discussion Conference

WEDNESDAY, MARCH 19, 1958

THIRD ASSEMBLY

Grand Ballroom, Sheraton-Cadillac Hotel

8:00 to 10:00 p.m. SYMPOSIUM ON THE PHRENOTROPIC DRUGS

Moderator: RAYMOND W. WAGGONER, M.D., Ann Arbor

Director, The Neuropsychiatric Institute, University Hospital

Participants:

"Phrenotropic Drugs in Mental Illness"

FRANCIS J. BRACELANO, M.D., Hartford, Connecticut
Psychiatrist-in-Chief, Institute of Living

"Pharmacological Aspects of the Phrenotropic Drugs"

EDWARD F. DOMINO, M.D., Ann Arbor

Assistant Professor of Pharmacology, University of Michigan

Phrenotropic drugs comprise a heterogeneous group of substances which have markedly different pharmacological properties. Various attempts have been made to categorize these agents on a psychiatric, pharmacological, and chemical basis. None of these classifications are fully satisfactory because of our relatively meager knowledge of brain function. One group of phrenotropic drugs, the tranquilizers, will be discussed in detail to illustrate this point. Some of the more probable sites and mechanisms of action of agents like reserpine, chlorpromazine, meprobamate and others will be described. The similarities or differences of these agents to various sedative-hypnotics like phenobarbital, or ethyl alcohol and their clinical implications will be pointed out.

"Clinical Aspects of the Phrenotropic Agents"

H. HOUSTON MERRITT, M.D., New York City

Professor of Neurology and Psychiatry, Columbia University, New York College of Physicians and Surgeons; Past President, American Neurological Association

* * *

So much interest in drugs affecting the mind has developed in the past few years that the Program Committee considered it appropriate to present this up-to-the-minute symposium on the ataratic or tranquilizing

drugs and the euphoriant drugs as an official part of the 1958 Michigan Clinical Institute.

Schering Corporation of Bloomfield, New Jersey, is sponsoring the complete program as well as a reception for doctors of medicine and their guests. The reception will be held immediately after the symposium.

THURSDAY, MARCH 20, 1957

A.M.

8:15 REGISTRATION—Top of stairs, Fifth Floor

EXHIBITS OPEN—Fourth Floor

FOURTH ASSEMBLY

NINTH ANNUAL MICHIGAN HEART DAY

Sponsored by Michigan Heart Association

Grand Ballroom, Sheraton-Cadillac Hotel

Chairman: M. S. CHAMBERS, M.D., Flint

Secretary: S. E. CHAPIN, M.D., Dearborn

HEART AND RHEUMATIC FEVER

8:30 Panel on "PERIPHERAL VASCULAR DISEASE"

Moderator: EDGAR V. ALLEN, M.D., Rochester, Minnesota

Senior Consultant in Medicine, Mayo Clinic; Professor of Medicine, University of Minnesota; Past President, American Heart Association

Participants:

WALTER L. ANDERSON, M.D., Detroit

Instructor of Clinical Medicine, Wayne State University College of Medicine; In Charge of Peripheral Vascular Clinic, Harper and Receiving Hospital, Out-Patient Departments.

SIBLEY W. HOOBLER, M.D., Ann Arbor

Associate Professor of Internal Medicine, University of Michigan Medical School

EUGENE A. OSIUS, M.D., Detroit

Chief, Department of Surgery and Vice Chief of Staff, Harper Hospital

D. EMERICK SZILAGYI, M.D., Detroit

Surgeon-in-charge of Section in General Surgery, Henry Ford Hospital

10:00 INTERMISSION TO VIEW EXHIBITS

11:00 "Rheumatic Fever"

CHARLES H. RAMMELKAMP, M.D., Cleveland, Ohio

Professor of Medicine, Western Reserve University; Director of Medicine, Cleveland City Hospital

11:30 "Digitalis Intoxication"

HARPER K. HELLEMS, M.D., Detroit

Associate Professor of Medicine, Wayne State University College of Medicine; Director, Cardiovascular Research, City of Detroit Receiving Hospital

While the digitalis preparations are one of the most important therapeutic methods in treating congestive heart failure, their improper use can produce a deleterious effect on cardiac function. Regardless of the preparation used, it is necessary that the patient be titrated to obtain a maximal therapeutic effect without toxic manifestations. The relationship of the potassium and calcium ions to digitalis effect are becoming increasingly apparent both in the inherent action of digitalis on cardiac function and in relation to cardiac toxicity of the drug.

This presentation will deal with the methods of digitalizing a patient, the clinical recognition of intoxication, and the methods of reversing such intoxication when it occurs, with the emphasis on the above relationships between electrolytes and digitalis action.

11:50 End of Fourth Assembly

Luncheon

DECEMBER, 1957



E. V. ALLEN, M.D.



W. L. ANDERSON, M.D.



S. W. HOOBLER, M.D.



E. A. OSIUS, M.D.



D. E. SZILAGYI, M.D.



C. H. RAMMELKAMP, M.D.



H. K. HELLEMS, M.D.



W. S. REVENO, M.D.



R. W. MONTO, M.D.



G. H. LOWREY, M.D.



I. SNAPPER, M.D.



H. A. HOWES, M.D.

P.M.

1:00 **COLOR TELEVISION PROGRAM**, beamed to the Grand Ballroom, Sheraton-Cadillac Hotel through the co-operation of the staff of Henry Ford Hospital, Detroit and Smith, Kline and French Laboratories of Philadelphia

2:30 **End of Television Program**

2:30 **INTERMISSION TO VIEW EXHIBITS**

FIFTH ASSEMBLY

Grand Ballroom, Sheraton-Cadillac Hotel

3:15 STEROIDS PANEL

Moderator: WM. S. REVENO, M.D., Detroit

Clinical Associate Professor of Medicine, Wayne State University College of Medicine; Attending Physician, Harper and Detroit Receiving Hospitals

Participants:

"The Use of Adrenocorticosteroids and Corticotrophin in the Management of Hematological Disorders"

RAYMOND W. MONTO, M.D., Detroit

Physician-in-Charge, Division of Hematology, Henry Ford Hospital

The adrenocorticosteroids and corticotrophin (ACTH) have wide therapeutic application in a variety of hematologic disorders. The immunohematologic diseases which include "idiopathic" thrombocytopenic purpura, acquired hemolytic anemia, and splenic neutropenia are generally classified under the category of hypersplenism. The course of each of these diseases is favorably influenced by the steroids and in many instances their application constitutes specific therapy.

The usefulness of these newer agents has been well established in the management of patients with acute and chronic leukemia, as well as in the disseminated lymphomas. Of specific interest is the ability of adrenocorticosteroids and ACTH to increase the vascular integrity in certain vascular hemorrhagic disorders and the thrombocytopenias.

While the mechanism of action of these hormones in disturbances of the hematopoietic system is not clearly understood, they nevertheless represent a major modality of therapy.

"Steroids in Pediatrics"

GEORGE H. LOWREY, M.D., Ann Arbor

Associate Professor of Pediatrics and Communicable Diseases, University of Michigan Medical School

"Osteoporosis"

ISIDORE SNAPPER, M.D., New York City

"The Use of Steroids in the Treatment of Allergic Conditions"

HOMER A. HOWES, M.D., Detroit

Physician, Harper Hospital; Attending Consultant, Veterans Administration Hospital, Dearborn; Assistant Clinical Professor of Medicine, Wayne State University

At the present time, there are available for clinical use various preparations of ACTH and cortico-steroids. The indications and contra-indications for their use in allergic conditions will be discussed, as well as the choice of preparation, required doses, and expected results. Also, necessary safeguard and untoward effects for which to be on the look-out will be reviewed.

An analysis of a series of cases treated with steroids will be made, with emphasis on certain special problems encountered.

4:30 **Questions and Answers**

5:00 **End of Fifth Assembly**

5:00 **DISCUSSION CONFERENCE—Grand Ballroom**

Leader: GORDON B. MYERS, M.D., Detroit

Participants: All guest essayists of the day (indicated above) will participate

5:30 **End of Discussion Conference**

No Michigan Clinical Institute Meeting Thursday Evening

FRIDAY, MARCH 21, 1957

A.M.

8:15 REGISTRATION—Top of stairs, Fifth Floor
EXHIBITS OPEN—Fourth Floor

SIXTH ASSEMBLY

Grand Ballroom, Sheraton-Cadillac Hotel

Chairman: D. W. THORUP, M.D., Benton Harbor

Secretary: T. J. TRAPASSO, M.D., Sault Ste. Marie



C. L. RANDALL, M.D.

OBSTETRICS-GYNECOLOGY-PEDIATRICS

8:30 "The Investigation and Treatment of Infertility"

CLYDE L. RANDALL, M.D., Buffalo, New York

Professor of Obstetrics-Gynecology, University of Buffalo; Chief, Department of Obstetrics-Gynecology, Buffalo General Hospital

Failure to conceive, while at first only disturbing, may become frustrating and eventually an obsession. Prospective parents may exhibit the same progression of tension if pregnancies result only in abortion or loss of the child as success seems assured. When sterility seems apparent, an orderly investigation is reassuring and the measures employed not infrequently seem to have been of therapeutic value. When fetal loss has occurred, investigative measures seem of little therapeutic value but treatment when indicated seems most effective when employed before conception is again evident.



J. PARKS, M.D.

9:00 "The Management of the Toxemias of Pregnancy"

JOHN PARKS, M.D., Washington, D. C.

Professor of Obstetrics and Gynecology; Dean of the School of Medicine, George Washington University

The exact cause of pregnancy toxemia remains unknown. The basic pathologic change in the mother is vasospasm. The degree of vasospasm usually increases gradually in the latter weeks of pregnancy. Tissue edema accompanies vasospasm. Hypertension is characterized first by a rise in the diastolic followed by an increase in the systolic blood pressure. The patients' warning signals of toxemia are: rapid weight gain, followed by headache, visual disturbances, epigastric distress, irritability, and occasionally convulsions. Proteinuria is usually a late sign of pregnancy toxemia.

There are three features in the management of the toxemias of pregnancy: prevention, palliation, and emergency treatment.

Preventive measures consist of careful prenatal observation of weight gain, blood pressure, eye grounds and urinalysis in the latter weeks of pregnancy. Usually, severe toxemia can be prevented by reduction in sodium intake, by fluid elimination using mild purgatives or diuretics, and by adequate evaluation and correction of emotional components.

The one purpose of palliative treatment is to prolong pregnancy and prevent fetal premature delivery. With the use of low sodium, high protein, high vitamin food intake, diuretics, sedation and antispasmodic or hypotensive drugs pregnancy may be prolonged with benefits to the fetus and without danger to the mother.

Emergency treatment involves various methods of dealing with fetal distress, convulsive states, pulmonary congestion, and cardiac failure in the mother with toxemia of pregnancy. Toxemia of pregnancy is one of the truly reversible hypertensive diseases occurring in early life. It is almost a preventive disease.



C. A. SMITH, M.D.

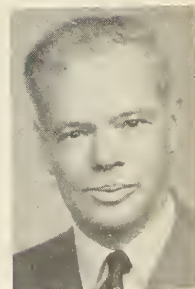
9:30 "Everyday Psychotherapy in Gynecology"

HERBERT T. SCHMALE, M.D., Ann Arbor

9:50 "Problems of the Newborn"

CLEMENT A. SMITH, M.D., Boston, Massachusetts

Associate Professor of Pediatrics, Harvard Medical School



P. V. WOOLLEY, M.D.

10:20 INTERMISSION TO VIEW EXHIBITS

11:10 "Treatment of Purulent Meningitis"

PAUL V. WOOLLEY, M.D., Detroit

Professor of Pediatrics, Wayne State University College of Medicine



W. W. WALLACE, M.D.

Attention
General
Practitioners

**ALL
PRESENTATIONS**

**on the
1958
MCI
Program**

**are
beamed
to the
GENERALIST!**

11:30 "Clinical Recognition of Fluid and Electrolyte Disorders in Infancy"

WM. M. WALLACE, M.D., Cleveland, Ohio

Gertrude Lee Chandler Tucker, Professor of Pediatrics; Chairman of the Department, Western Reserve University School of Medicine, Department of Pediatrics; Director, Babies and Children's Hospital

Advances in clinical laboratory techniques in the past decade have led to undue emphasis on characterization of status of electrolyte and fluid unbalance in terms of ionic concentrations in the body fluids. While the utilization of such techniques are important and often required for definitive diagnosis and guidance of therapy, it is essential that the primary importance of clinical observation should not be forgotten. Optimally, the use of chemical analyses should follow, not precede, accurate clinical diagnosis.

The types of fluid and electrolyte deficits and the disturbances of acid-base balance peculiar to infancy will be discussed in terms of history and symptomatology and the chemical and therapeutic correlations of the more important ones pointed out.

**12:00 End of Sixth Assembly
Luncheon**

P.M.

1:00 COLOR TELEVISION PROGRAM, beamed to the Grand Ballroom, Sheraton-Cadillac Hotel through the co-operation of the staff of Henry Ford Hospital, Detroit and Smith, Kline and French Laboratories of Philadelphia

2:30 End of Television Program

2:30 INTERMISSION TO VIEW EXHIBITS

SEVENTH ASSEMBLY

Grand Ballroom, Sheraton-Cadillac Hotel

Chairman: J. W. RICE, M.D., Jackson

Secretary: G. E. MILLARD, M.D., Detroit

"YESTERDAY'S HOPELESS—NOW CURABLE!"

3:00 Pharmaceutical Lecturer

FRANCIS BROWN, Bloomfield, New Jersey
President, Schering Corporation

3:30 (Subject to be announced)

HOWARD D. FABING, M.D., Cincinnati, Ohio

4:00 (Subject and speaker to be announced)

4:30 (Subject to be announced)

MARION B. SULZBERGER, M.D., New York City

5:00 End of Seventh Assembly

5:00 DISCUSSION CONFERENCE—Grand Ballroom

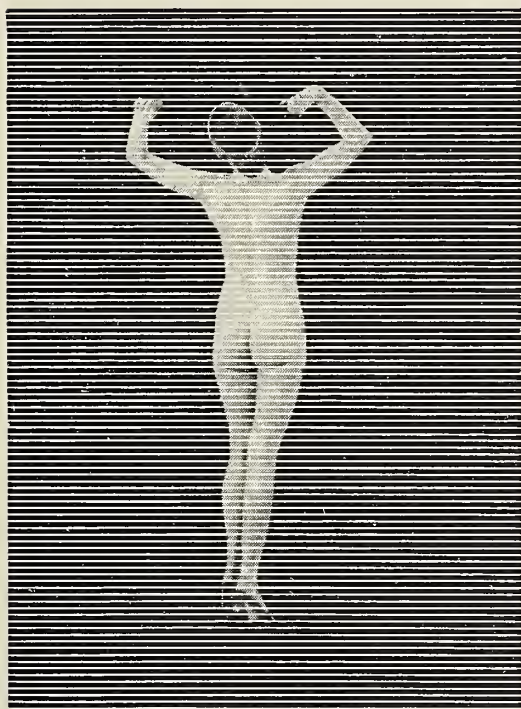
Leader: PAUL DE KRUIF, Ph.D., Holland

Participants: All guest essayists of the day (indicated above) will participate

5:30 End of Discussion Conference and the 1958 Michigan Clinical Institute

Floraquin[®]

Destroys Vaginal Parasites Protects Vaginal Mucosa



Vaginal discharge is one of the most common and most troublesome complaints met in practice. Trichomoniasis and monilial vaginitis, by far the most common causes of leukorrhea, are often the most difficult to control. Unless the normal acid secretions are restored and the protective Döderlein bacilli return, the infection usually persists.

Through the direct chemotherapeutic action of its Diodoquin[®] (diiodohydroxyquin, U.S.P.) content, Floraquin effectively eliminates both trichomonal and monilial infections. Floraquin also contains boric acid and dextrose to restore the physiologic acid pH and provide nutriment which favors regrowth of the normal flora.

Method of Use

The following therapeutic procedure is suggested: One or two tablets are inserted by the patient each night and each morning; treatment is continued for four to eight weeks.

Intravaginal Applicator for Improved Treatment of Vaginitis

This smooth, unbreakable, plastic device is designed for simplified vaginal insertion of Floraquin tablets by the patient. It places tablets in the fornices and thus assures coating of the entire vaginal mucosa as the tablets disintegrate.

A Floraquin applicator is supplied with each box of 50 tablets. G. D. Searle & Co., Chicago 80, Illinois. Research in the Service of Medicine.

SEARLE

Michigan's Department of Health

Albert E. Heustis, M.D., Commissioner

THE JOY OF LISTENING

"The Joy of Listening" is the latest in a series of documentary type movies being produced by the Michigan Department of Health. The series is aimed primarily at interpreting the services of the department whose success depends a great deal upon public understanding and participation.

The new film portrays a hearing conservation program typical of those carried on in Michigan through the co-operation and combined facilities of local health departments, medical societies, public and parochial schools and the Michigan Department of Health. Following a community hearing conservation project step by step, the movie opens up with the preliminary hearing screening of a third-grade classroom by a hearing screening technician hired locally and trained by the Michigan Department of Health. She checks all of the pupils at one time through the use of a group screening audiometer.

The film then singles out and follows three children who are picked up in the group screening. These children have their hearing evaluated further by a threshold screening technician who does an individual audiogram for each child. Following this, an audiologist from the Michigan Department of Health may do further tests to evaluate hearing losses a little further. Because all three have significant hearing losses they are referred for examination by an ear specialist in a clinic sponsored by the state and local health departments and the local medical society. Parent attendance at the otological examination is emphasized as essential if they are to understand the importance of the recommendation made by the physician.

The parents of the three children then consult their own physician regarding treatment recommended at the otological clinic. A copy of the hearing evaluation and the otological report are sent to the physician. Experience has shown that at least seven out of every ten children with hearing losses can have their hearing restored or greatly improved with prompt medical attention. In others, the hearing defect can usually be prevented from getting worse and, with the aid of special education, a better adjustment to the hearing handicap can be made.

The three children in the film each represent a different type of hearing loss. One, whose hearing loss is a result of foreign matter obstructing the ear, has his hearing restored after the obstruction is removed. The second, with a moderate hearing loss in one ear, is helped simply by moving her to the front of the room. The third, whose hearing loss is severe and irreversible, is given special help in a hearing clinic.

In the hearing conservation programs, local health department nurses help to interpret the child's needs to the parents and the department works with the community agencies and the Crippled Children Commission to assist needy children in getting medical care. As the film shows, even the child with a permanent handicapping hearing loss can be helped by a variety of state and local organizations interested in the problem.

Running time of the black and white sound film is thirteen minutes which makes it easily adaptable for local television stations programming. "The Joy of Listening" is available upon request from the Film Loan Library of the Michigan Department of Health.

CHILDREN GET SUMMER FLUORIDE PROTECTION

For the tenth consecutive summer, topical fluoride programs for children three to thirteen years of age were sponsored by the Michigan Department of Health in co-operation with local communities asking the service. A total of 35,000 boys and girls took part in the 1957 programs throughout the state. Over the ten-year period, 185,000 children have been given this protection during vacation days.

As in the past, senior dental students and dental hygiene students did the work, supervised by local dentists. A total of fifty-nine students took part, working in 173 centers in forty-five counties. To make the programs self-supporting, a small fee was charged for children who could afford to pay.

In many communities, the summer topical fluoride schedules supplement the year-around program. The topical application method of giving children the protection of fluoride functions in communities too small for a public water supply or where a supply lacks the one part per million of fluoride that safeguards against tooth decay. The method is slightly more than half as effective as the fluoridation of water, which reduces decay by approximately 60 per cent.

A deeper knowledge of cancer, far from accentuating the fear inspired by the disease, is the best means of allaying it.

* * *

An incomplete diagnosis or reliance on inadequate methods of treatment has often resulted in loss of opportunity for early and better care.

* * *

A cancer that has been meddled with is more dangerous.

STOP ^{Michigan} LEG CRAMPS

You

DOCTOR:

can prove for yourself — right in your own office — the
Better Assimilation of Oyster Shell Calcium
by stopping leg cramps when other calciums have failed.

*Here's WHY Oyster Shell Calcium is *Better Assimilated:*

1. Richest known source of Calcium—40% pure elemental Calcium.
2. Contains all natural trace minerals.
3. Phosphorus-free.

*Bio-chemical research proves twice the percental increase in blood Calcium.

FREE—10 BOTTLES (100's) OS-CAL tablets—30-day clinical supply for
10 patients—on personal request of physician (by January 31, 1958)

Oyster Shell Calcium Products:

OS-CAL

Oyster Shell Calcium
Natural Trace Minerals
Vitamin D

DOSAGE: 1 tab. t.i.d.

OS-VIM

Oyster Shell Calcium
B-Complex
Vitamins A-D-C-E
Natural Trace Minerals
Ferrous Sulfate

DOSAGE: 1 tab. t.i.d.

OS-*feo*-CAL

Therapeutic Iron
Oyster Shell Calcium
Vitamin D
Natural Trace Minerals

DOSAGE: 1 tab. t.i.d.

OS-*feo*-VIM

Therapeutic Iron
Oyster Shell Calcium
Vitamins A-D-C-B6 and K
Natural Trace Minerals

DOSAGE: 1 tab. daily.

note low dosages!

MARION

LABORATORIES, Inc.

2910 Grand Ave. • Kansas City, Missouri

*HARDY, J. A.: *Obstet. & Gynec.* (Nov., 1956)

In Memoriam

Noah E. Aronstam, M.D., eighty-six, Detroit physician, died September 30, 1957. Born in Latvia, Doctor Aronstam came to Detroit in 1892 and graduated from the Michigan College of Medicine six years later.

Doctor Aronstam began practicing medicine in 1898 and continued in Detroit without interruption until his retirement last year.

An authority on diseases of the skin, Doctor Aronstam served as a professor of dermatology and urology at his alma mater and authored hundreds of articles in medical journals on these subjects. He was a strong advocate of premarriage examinations.

Doctor Aronstam was a pioneer in the Zionist movement in Detroit and played a prominent role in the founding of the Detroit Philosophical Society. Known primarily as a physician, he was also, author, teacher, poet, scientist and philosopher. His five published books included a study of Spinoza.

Harry J. Defnet, M.D., sixty-seven, Escanaba physician and surgeon, died October 1, 1957. Born in Lincoln, Wisconsin, August 25, 1890, and moving to Escanaba at an early age, Doctor Defnet began his medical career at the Detroit College of Medicine, 1909-16. He was affiliated with Nu Sigma Nu fraternity.

He volunteered for service in World War I, served with the 106th Field Ambulance of the British Expeditionary Forces in France from April, 1916; was a member of the U. S. Army Medical Corps, 35th Division until June, 1919. Retiring from the service with the rank of Captain, he set up a practice of general medicine and surgery in Escanaba.

Doctor Defnet was an adult leader in the Boy Scouts and was a former Escanaba city Health Officer.

Clarence L. Hathaway, M.D., eighty-three, Oakland County physician for more than half a century, died October 25, 1957.

Doctor Hathaway was born in Oakland County, graduated from the old Michigan College of Medicine and Surgery in 1903 and practiced medicine in the Lake Orion area until his retirement in 1955. During World War I, he served as a Captain in the Army Medical Corps.

Augustus Holm, M.D., eighty-five, practiced medicine in LeRoy for over fifty years, until his retirement five years ago.

Born in Smaland, Sweden, 1872, and coming to the U.S. in 1889, he attended public schools in Decatur, Michigan, and was graduated from the University of Michigan medical school in the year 1901.

Death occurred September 15, 1957.

Lafon L. Jones, M.D., seventy-two, Flint pediatrician, died October 1, 1957.

Born in Louisville, Kentucky, January 20, 1885, he attended high school there and earned a bachelor of

science degree from Princeton University in 1905. In 1914, he received a doctor of medicine degree at the University of Michigan and that same year started his practice in Sebewaing.

Doctor Jones moved to Flint and opened practice in July, 1918. With interest developed in his work as city and school physician, he started specializing in the practice of pediatrics in 1920.

He devoted a good share of his time to voluntary service in the community. Active in the Michigan's Children's Aid Society, he was president of the organization's board of directors in 1938, and in 1944 was named to its board of trustees.

Doctor Jones was one of three medical advisors of the Clare Elizabeth Fund for Maternal Health, having served continually since its beginning in 1939. He attended every monthly meeting and was one of the strongest advocates for improvement in health education.

In December, 1954, he resigned after serving twenty-eight years as Chief of the Pediatrics section at Hurley Hospital.

The following excerpt from the *Flint Journal* expresses his typical physician's devotion:

"Although a truly humble man, never seeking publicity and always letting it be known he had no desire for recognition, he couldn't escape one of his warmest tributes.

Sixty mothers who wanted to show their appreciation at Christmas time for his work with their children, gave him a gold wrist watch inscribed, "To Our Beloved Doctor Lafon Jones, Christmas 1953, From Your Children." The mothers wanted to arrange a testimonial dinner, but with characteristic modesty he vetoed the plan. It even was difficult to persuade him to consent to a newspaper photograph of the watch presentation. He said he feared it might be construed as promotional."

Doctor Jones was a member of the American Academy of Pediatrics, Flint Golf Club and the Elks.

* * *

Lee E. Kelsey, M.D., seventy-seven, Lakeview physician and founder of Kelsey Hospital, Lakeview, died in October, 1957.

The Montcalm County community's twenty-six-bed hospital was founded in 1908. This year provision was made to make it a community hospital, operating under a board of trustees.

Doctor Kelsey was a University of Michigan Medical School graduate and had practiced medicine for fifty-three years.

Harry C. Kurtz, M.D., forty-five, Grosse Pointe Park anesthesiologist, died October 19, 1957.

Doctor Kurtz was a graduate of the Ohio State College of Medicine and for the past eight years was on the staff of Deaconess Hospital.

Omer Guy McFarland, M.D., seventy-four, of North Adams, died October 11, 1957.

Doctor McFarland, Hillsdale County's oldest prac-

(Continued on Page 1604)

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(Continued from Page 1602)

ticing physician, had been North Adams's only physician for thirty-seven years.

A native of Redkey, Indiana, he attended Purdue University Medical School where he graduated in 1906. He interned at Fort Wayne, Indiana, and practiced in Indiana and Nebraska before coming to Hillsdale County in 1913. He spent seven years in Montgomery before moving to North Adams in 1920.

Doctor McFarland was a former president of the Montgomery Bank and a director of the Hillsdale National Bank at the time of his death.

Ralph A. Poirier, M.D., forty, Detroit physician, died September 28, 1957. Dr. Poirier was an active member of Wayne County Medical Society and of the Michigan State Medical Society.

John W. Purdy, M.D., seventy-nine, of Alpena, died October 4, 1957.

Doctor Purdy was born August 17, 1878, near London, Ontario, Canada. He came to Alpena County in 1902, settling in Long Rapids, after his graduation from the Saginaw Valley Medical College.

In 1904, he lost his vision as the result of cataracts but continued to practice medicine, and was active until the time of his death. He was Alpena's oldest practicing physician.

Carl S. Ratigan, M.D., sixty-three, Dearborn surgeon, died September 23, 1957.

A native of Detroit, Doctor Ratigan was a graduate of the University of Detroit and received his medical degree in 1919 at Wayne University College of Medicine.

He was the first Chief of Staff at Oakwood Hospital, a member of the first hospital commission in Dearborn, and was named by the *Dearborn Press* in 1952 as one of its "Citizens of the Year."

Doctor Ratigan was a fourth degree Knight of Columbus, belonged to the Exchange Club, and was a charter member of the Detroit Yacht Club.

John E. Vanderlaan, M.D., forty-one, Muskegon, was killed in an airplane accident, September 27, 1957, in the State of Washington.

A native of Muskegon, Doctor Vanderlaan received his education at Muskegon Junior College, a bachelor's degree from Hope College in 1936. He graduated cum laude from Harvard University Medical School and then entered the University of Chicago clinics where he interned in surgery and internal medicine.

An avid private flyer, he was an active member of the Muskegon Aeroter, Aero Club of Michigan and was president of that organization.

* * *

Wayne L. Whitaker, Ph.D., fifty-three, Ann Arbor, Assistant Dean of the University of Michigan Medical School, died September 29, 1957.

Professor Whitaker's major interest and activity in recent years had been in the equitable and effective

(Continued on Page 1606)

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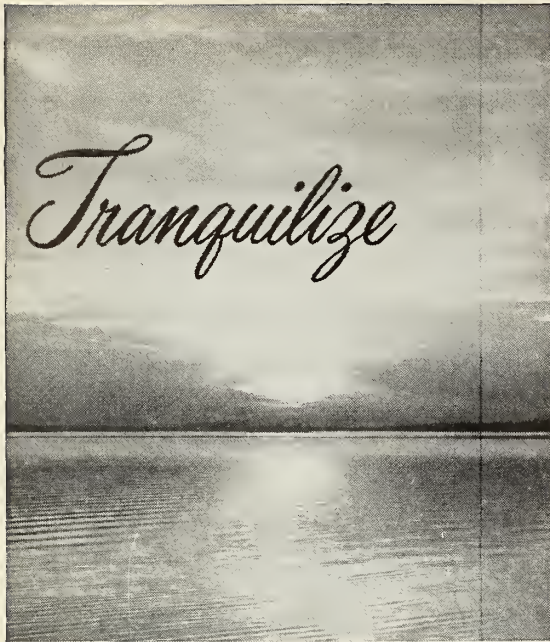
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(Continued from Page 1604)

selection of medical students and the encouraging of qualified high school students in Michigan to work toward a medical education.

A native of Putnamville, Indiana, he took his undergraduate work at DePauw University. Following graduation in 1926, he was assistant pastor of the First Methodist Church in Elkhart, Indiana. In 1928, he became assistant director of Lawrence Hall, a home for dependent boys in Chicago. In 1932, he entered the graduate school at the University of Michigan and received his master's degree in 1934.

He received his Ph.D. degree from the University of Michigan in the field of zoology in 1939. He was promoted to assistant professor in 1943, associate professor in 1949 and professor in 1956.

Professor Whitaker made a noteworthy contribution in the field of cancer chemotherapy research, volunteering himself as a subject for experiments during the length of his illness.

Among his national professional activities, Professor Whitaker was a member of the American Association of Anatomists, Sigma Xi professional scientific fraternity, the Scientific Research Club (president 1954-1955), the Committee for the Evaluation of the Medical Student of the Association of American Medical Colleges, the Michigan State Board of Registration in Medicine Screening Board for Foreign Doctors, and the Detroit Interracial Study Committee.

Among his responsibilities at the University of Michigan, he was a member of the Barbour Scholarship Committee for Foreign Students, Executive Committee of the University of Michigan Medical School, the University of Michigan Committee on College Relations, and chairman of the Student Research Fellowships Committee.

TREATMENT OF SYPHILIS, CHANCROID, AND OTHER VENEREAL DISEASES

(Continued from Page 1516)

Erythromycin are also effective. Penicillin is not effective and should not be used.

Lymphogranuloma Venereum.—Treatment is unsatisfactory. Sulfonamides as used in Chancroid are fairly effective but prolonged treatment is usually necessary. Treatment of choice is Tetracyclines $\frac{1}{4}$ to $\frac{1}{2}$ gram Q.I.D. according to tolerance for a total dosage of 30 to 60 grams.

Granuloma Inguinale.—Tetracyclines $\frac{1}{4}$ to $\frac{1}{2}$ gram Q.I.D. for a total dose of 20 to 60 grams according to tolerance and response. For hospitalized cases Streptomycin 1 gram q6h for five to ten days (20 to 40 grams). Where Tetracyclines are not available for ambulatory treatment Antimony compounds may be substituted.

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MICHIGAN AUTHORS

John M. Dorsey, M.D., Detroit, is the author of an article entitled "Living Education," published in the April and May issues of *Michigan Educational Journal*, 1957.

Harry A. Pearse, M.D., and J. David Trisler, M.D., Detroit, are the authors of an article entitled "A Rational Approach to the Treatment of Habitual Abortion and Menometrorrhagia," published in *Clinical Medicine*, September, 1957.

William S. Carpenter, M.D., F.A.C.S., and Paul J. Connolly, M.D., F.A.C.S., Detroit, are the authors of an article entitled "Chronic Ulcerative Colitis," published in *Clinical Medicine*, October, 1957.

Martin J. Urist, M.D., South Haven, is the author of an article entitled "Bilateral Blepharospasm," published in *A.M.A. Archives of Ophthalmology*, October, 1957.

Earl G. M. Krieg, M.D., Detroit, is the author of an article entitled "Regional Enteritis," published in the *American Journal of Gastroenterology*, October, 1957.

D. Emerick Szilagyi, M.D., Richard T. McDonald, M.D., Roger F. Smith, M.D., and John G. Whitcomb, M.D., Detroit, are the authors of an article entitled "Biologic Fate of Human Arterial Homografts," published in *A.M.A. Archives of Surgery*, October, 1957.

Eli M. Brown, M.D., Huntington Woods, is the author of an article entitled "Role of Bronchoscopy in the Prevention of Postoperative Atelectasis," published in the *Journal of the American Medical Association*, October 26, 1957.

John H. Ganschow, M.D., Detroit, is the author of an original article "Conservation Program in Industries," which was published in *Industrial Medicine and Surgery*, September, 1957.

Paul S. Barker, M.D., Ann Arbor, is the author of an article entitled "Myocardial Infarction," presented at the annual Collier-Penberthy Medical Conference, Traverse City, July, 1957, and published in the *University of Michigan Medical Bulletin*, September, 1957.

Lawrence Reynolds, M.D., Detroit, is the author of an article entitled "Blumer's Shelf Tumors," presented at the annual Collier-Penberthy Medical Conference in Traverse City, July, 1957, an abstract of which appears in the *University of Michigan Medical Bulletin*, September, 1957.

George W. Morley, M.D., Ann Arbor, is the author of an article entitled "Erythroblastosis Fetalis—Obstetrical Aspects," presented at the annual Collier-Penberthy Medical Conference, Traverse City, July, 1957, and published in the *University of Michigan Medical Bulletin*, September, 1957.

Ruth M. Heyn, M.D., and Harry A. Towsley, M.D., Ann Arbor, are the authors of an article entitled "Pediatric Management of the Erythroblastotic Infant," published in the *University of Michigan Medical Bulletin*, September, 1957.

Clifford D. Benson, M.D., Detroit, is the author of an article entitled "Surgical Emergencies in the Newborn," published in the *University of Michigan Medical Bulletin*, September, 1957.

M. S. DeWeese, M.D., and Wm. J. Fry, M.D., Ann Arbor, are the authors of an article entitled "Experiences with Abdominal Aortic Resection: A Preliminary Report," published in the *University of Michigan Medical Bulletin*, September, 1957.

John M. Sheldon, M.D., and Roy Patterson, M.D., Ann Arbor, are the authors of an article entitled "Surgical Risk in the Allergic Patient," published in the *University of Michigan Medical Bulletin*, September, 1957.

E. C. Vonder Heide, M.D., Detroit, is the author of an article entitled "Laboratory and Clinical Approach to Bleeding Problems," published in the *University of Michigan Medical Bulletin*, September, 1957.

M. H. Stevens, M.D., Ann Arbor, is the author of an article entitled "The Tranquilizers," published in the *University of Michigan Medical Bulletin*, September, 1957.

Herman H. Riecker, M.D., and Khurshid A. Mian, B.V.Sc., M.P.H., are the authors of an article entitled "The Management of Resistant Infections as Aided by a New Method for Rapid Sensitivity Determinations," published in the *University of Michigan Medical Bulletin*, September, 1957.

Harry M. Nelson, M.D., Detroit, is the author of an original article, "Exfoliative Cytology in the Detection of Uterine Cancer," which appeared in the *Bulletin of the American College of Surgeons*, November-December, 1957, number.

William S. Reveno, M.D., and Herbert Rosenbaum, M.D., Detroit, are co-authors of an original article entitled "Chronic Treatment of Toxic Diffuse Goiter" which appeared in the *AMA Archives of Internal Medicine*, October, 1957.

* * *

Chronic Diseases.—Surgeon-General Leroy E. Burney, speaking to a capacity crowd of students in the Public Health Auditorium, University of Michigan, on October 21, 1957, said preventive medical activities must be increased, if the nation is to avoid an avalanche of chronic diseases in the future. He cited glaucoma and cervical cancer as examples of diseases where known

(Continued on Page 1612)

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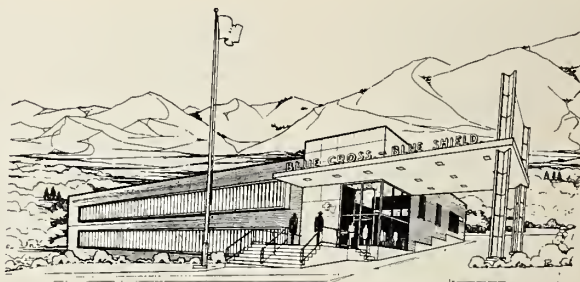
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(Continued from Page 1610)

methods of treatment and remedial care are not being widely applied. As our population increases and becomes older, it is doubtful whether we can meet the needs of chronic disease cases simply by building the 800,00 to 850,000 additional hospital beds we now need. He cited the need for research and especially the need for people in public health who can look ahead instead of waiting until its problem is at our doorstep.

* * *



The Utah Blue Cross-Blue Shield began construction, October 16, on a new home office. Sister Hilary, Administrator of Holy Cross Hospital and President of Blue Cross, and Paul A. Clayton, M.D., President of Blue Shield, made the announcement. The two organizations have one director, Louis J. Hersey, formerly of Michigan Medical Service. The two units have more than 155,000 enrolled, and their present building is entirely inadequate. The modern new home shown above will overlook the entire valley from the mouth of Parley's Canyon.

* * *

Flu Vaccine.—Gordon Brown, M.D., Professor of Epidemiology, speaking before the University of Michigan College of Pharmacy and the Michigan Branch of the Michigan Pharmaceutical Association, stated that the antigenic differences between the Asian flu virus and other flu viruses known is what has made it such a widespread infecting agent. He said it is most important in maintaining an effective vaccine, that new types of viruses be recognized as soon as they appear "Because of the degree of variations in virus strains and types. It is imperative that any new strain that is shown to be antigenically different must be recognized and incorporated into the flu vaccine as soon as possible." He added, "The more different a new virus is from its known predecessors, the more chance there is for its rapid spread, both in persons who have had vaccinations against other flu viruses and persons who have been previously infected by a flu virus." He mentioned that polio virus has three strains which are constant, and antibodies will neutralize the type. The same applies to smallpox. The flu virus is different. "It not only shows up periodically as a different type mutated from a previous type but has a vast range of strains in each type which make the job of providing a completely effective vaccine an exacting, almost impossible task. A person with a shot may be immunized against one strain but infected by another."

(Continued on Page 1616)

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1. Pollock, B. E., and Pruitt, F. W.: *Am. J. M. Sc.*, 226:172, 1953.

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(Continued from Page 1612)



Control of the Battle Creek Sanitarium has been assumed by the Hospital Service Foundation, a newly organized group of physicians interested in the continued operation of the historic institution.

Founded more than ninety years ago, the Sanitarium is best known for pioneering principles of nutrition, physical medicine, surgery, and psychosomatic medicine now generally accepted. It is credited for changing the diet of the civilized world, for from its famous dining room came the breakfast cereals which made Battle Creek the cereal food capital of the world.

Replying to queries as to the institution's future, Dr. Dunbar Smith, incoming administrator, stated, "In addition to therapeutic principles for which the Sanitarium has been known through the years, the most modern medical, surgical and psychiatric service will be offered."

Immunization.—Ernest Watson, M.D., Professor of Pediatrics and Communicable Diseases at the University of Michigan, told the Michigan pharmacists, October 23, with old-time killing diseases such as smallpox, diphtheria, whooping cough and scarlet fever are being controlled today for the most part by the immunization programs which have been built up over the past year. He warned, however, "they will again become of epidemic proportions and cause many fatalities if routine immunization should ever lapse." He said that 100 years ago, 33 out of every 100 children born did not survive through their fifth year. Today this number is 25 out of 1000 born. In 1857, the primary cause of death from birth to five years of age was pneumonia. Today the primary cause is accidents and not disease. Today's children are larger and healthier by far than children have ever been in the history of the world. He attributed this to two factors: improved nutrition and control of infection.

* * *

Based upon Public Health reports of the week ending October 5, 1957, an estimated 8,500,000 men, women and children were in bed for one or more days with upper respiratory illness. This figure is based upon reply from questionnaires used in the National Health Survey sampling throughout the country during the week of October 12. The United States Public Health Service, the last week in October, released 7,035,560 cc. of Asian flu vaccine, which brings a total to date of 34,194,047.

Ultrasonic sound can be used to destroy cancer, chart the structure of living cells, and play a part of the treatment of mental disorders, a scientific meeting at The University of Michigan was told Friday, October 25, 1957.

William J. Fry, M.D., of the University of Illinois' Bioacoustics laboratory told the 54th meeting of the Acoustical Society of America that Russian scientists claim they can selectively destroy cancer tissue with beams of high frequency sound.

Tumors so treated could not be transplanted to an experimental animal, Dr. Fry said, "This implies that a type of immunity to cancer has been produced. They also report that the highly malignant tumor melanoblastoma has been treated in humans with encouraging results."

Dr. Fry also described an "ultrasonic microscope" which has been developed at his university. It directs beams of sound through tissue samples while probes on the other side measure the amount that gets through.

In this way, it is possible to chart the distribution of protein in cells, a feat which cannot be duplicated by optical microscopes.

Turning to neurology, he said "three dimensional mapping of brain function of a type and power heretofore completely unattainable will be possible by sweeping focussed beams of ultrasound through the tissue and observing the resultant changes."

"Human neurosurgery by ultrasound is just beginning. Then, too, ultrasound may be useful in eliciting responses, for diagnostic purposes, in patients suffering from various mental disorders."

A total of 107 papers were presented during the meeting, which ended October 26. About 400 acoustics experts attended.

* * *

M. K. Newman, M.D., Detroit, was elected to the Board of Governors of the American Academy of Physical Medicine and Rehabilitation for a period of three years, at the meeting held in the Statler Hotel, Los Angeles, California, September 9, 1957.

* * *

Herbert Bartlett Honored.—On September 28, 1957, the Michigan Tuberculosis Association awarded the Certificate of Recognition and Appreciation to Herbert Bartlett, M.D., of Muskegon, because of meritorious service in the voluntary fight against tuberculosis. The certificate was awarded posthumously and received by Mrs. Lucy Bartlett on the occasion of the 50th anniversary annual meeting. Dr. Bartlett came to Muskegon as Medical Director of the County Tuberculosis Sanatorium in 1926. He had had experience in Pontiac and in the Illinois Sanatorium. He worked very industriously in Muskegon, helped organize tuberculosis case-finding clinics, in Muskegon, Grand Haven and Holland. He had been actively interested in the Michigan Tuberculosis Association, the Mississippi Valley Conference and the Michigan Trudeau Society. He was also Past President of the Muskegon County Medical Society.

* * *

Wayne State University College of Medicine on October 16, 1957, announced gifts totalling more than \$116,000. The largest single gift was \$46,303 from

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the American Cancer Society to continue research under the direction of Arthur J. Vorwald, M.D. From the estate of William A. Spitzley, M.D., came a grant of \$18,905.69. The U. S. Public Health Service, National Institutes of Health, gave \$11,500 to continue research under the direction of Ernest Gardner, M.D.

The Bureau of State Services, U. S. Public Health Service, granted \$12,247 to continue traineeship in public health nursing. The W. B. Saunders Company gave \$6,000 to be added to a fund to defray expenses of illustrating a textbook of human anatomy under the direction of Drs. Ronan O'Rahilly and Ernest Gardner. There were numerous small grants.

* * *

Dr. Gordon H. Scott, Dean of Wayne State University College of Medicine, was chosen President-Elect by the Association of American Medical Colleges meeting in Atlantic City on October 23, 1957.

* * *

The Public Health Service and the National Tuberculosis Association have issued reports on the results of the only nationwide survey in five years on tuberculosis. Active tuberculosis has declined 30 per cent, but the general control picture is not entirely reassuring. There are still 250,000 cases among persons known to have tuberculosis in an active form. The check shows that despite intensive effort for control, almost 40 per cent of the active cases are unknown to health authorities, and these people are not receiving treatment. This unknown list is estimated on the basis of x-ray survey findings. The most encouraging phase of the report is that active cases have dropped from 350,000 to 250,000, and inactive cases requiring supervision of health departments from 600,000 to 550,000.

* * *

Samuel T. Gibson, M.D., national director of the Red Cross Blood Program, reports that in the fiscal year 1956-57, 390,000 used the Red Cross Blood and this for the first time in the nine years' program, reached every state in the union. 2,047,000 pints were taken from voluntary donors for civilian use, all but 285,000 of which was used by hospitals for whole blood transfusion.

* * *

Asian Flue Vaccine.—Surgeon-General Burney of the Public Health Service, has announced that it is now possible to double the potency of the Asian influenza vaccine, and the more potent doses will increase not only the degree of immunity but the rapidity by which immunity is achieved. The Surgeon General has directed that the new 400 CCA units be produced immediately—as soon as feasible.

* * *

The first National Conference on Nursing Homes for the Aged will be held in Washington, February 25 to 28, 1958. It is estimated that 300,000 men and women are now being sheltered and cared for in about 25,000 nursing homes, and expenditures for this purpose are approximately \$550,000,000 annually. The Government is interested and hopes medical societies and private agencies may be interested in raising the quality of services which these homes provide. Surgeon-General Leroy E. Burney raised this question at the American Nursing Home Association meeting in Atlantic City

JMSMS

early in October. This ties in with a discussion at the subcommittee meeting of the A.M.A. Council on Medical Service in Chicago, October 20 and 21, and the recommendation of a liaison committee to carry through and keep posted on the nursing home situation.

* * *

Contributory Insurance.—It has been proposed that the State of New York enter into a contributory insurance program covering about 70,000 of its employees and about 7,000 additional in the retired status plus dependents. This is reported to be the most liberal and comprehensive program enacted by a governmental body to provide its employees with protection against medical care costs. State employees electing to participate will have the choice of Blue Cross-Blue Shield; group care plans, and other plans. The share of costs will depend upon the type of coverage selected and whether the dependents are included. Hospitalization, surgical and non-hospital medical benefits are provided. Major medical expense is included and home and office care will be received by employees choosing group practice benefits.

* * *

Farm-City Week.—The American Medical Association has urged state and county medical societies to join in the farm-city week, November 22 to 28, 1957, conducted by the Kiwanis clubs throughout the nation. The AMA Council on Rural Health has recommended a list of topics to be of interest to the farm people. Since the purpose of the week is to lead to the understanding of each other's neighbors, city dwellers would benefit equal-

ly from their discussion. Suggested discussion topics: nutrition, medical costs and voluntary insurance, environmental and rural sanitation, school health, safety programs, rural distribution of physicians, preventive medicine, mental health, careers in medicine, insecticide and pesticide poisoning.

* * *

Veterans Administration Statistics.—The following information was taken from the VA records, as of July 5, 1957:

Veterans in civil life.....	22,641,000
Korean veterans.....	5,122,000
World War I and II veterans.....	17,389,000
Increase in past year.....	236,000
Average patient load in VA hospitals.....	109,579
In non-VA hospitals.....	2,920
Decrease during year.....	66
Eligible hospitalization applicants awaiting admission	22,188
Medical out-patients during June, 1957....	161,110
Decrease from June, 1956.....	10,359

Harvey V. Higley, Veterans Administration Administrator reported that one-third of their patients are service-connected and two-thirds are non-service-connected.

* * *

Wayne State University's Board of Governors, at the October meeting, authorized the University to seek funds from the legislature to increase the size of the medical school from seventy-five entering students to 125. They asked for a supplementary budget of \$285,650 for additional faculty, equipment and operating

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money. This would help in relieving the critical shortage of doctors in Michigan.

* * *

Tax Rule on Fees for Dental Courses.—To resolve any doubt, the internal revenue department has issued a ruling which for tax purposes draws a distinction between admission to lecture halls and admittance to movie houses and race tracks. Advice had been sought as to whether federal tax on admission was applicable to fees charged to a series of lectures in dental practice administration and dental office management. Such charges it was held are in the nature of tuition fees for educational instruction and not amounts paid for admission, hence not subject to tax on admission.—WRMS, October 21, 1957.

* * *

The United States Supreme Court, in October, denied review of several cases involving medical questions. A physician sought to compel the California Board of Medical Examiners to overturn his year's suspension from practice following conviction of income tax evasion on a plea of nolo contendere. Another case against a Manhattan Life Insurance Company in which the insured denied liability except for return of premiums on the ground that a policy holder made fraudulent representations of physical condition. He died and his widow tried to collect. The Supreme Court refused to hear the case.—WRMS, October 21, 1957.

* * *

National Medical Foundation for Eye Care.—Due to the public confusion in the field of medical eye care and the difference in the training and functions of ophthal-

mologists, opticians and optometrists, the ophthalmologists with the sanction of the Section on Ophthalmology of the American Medical Association have formed a National Foundation within the year to create a better public understanding of the professional and scientific standards of good eye care and the qualifications and functions of ophthalmologists and all the related technical personnel who assist them in providing eye care to the public. The foundation has recently published a very worthwhile pamphlet, "What Is an Ophthalmologist?" and a report, "Medicine, Optometry and the Public Welfare." Nearly 200,000 copies of the pamphlet have been ordered. This program has the official endorsement and contains among others, the names of Harold F. Falls, M.D., Ann Arbor; A. D. Ruedemann, M.D., Detroit, and Derrick Vail, M.D., Chicago. The pamphlet may be secured by request to the Executive offices, 250 W. 57th Street, New York 19, New York.

* * *


The American Academy of Physical Medicine and Rehabilitation announces the election of new officers, including James W. Rae, Jr., M.D., of Ann Arbor, as Treasurer. George D. Wilson, M.D., Asheville, N. C., is the new President; Louis B. Newman, M.D., Chicago, President-elect; Clarence W. Dail, M.D., San Gabriel, California, Vice President; and Harriet E. Gillette, M.D., Atlanta, Georgia, Secretary.

* * *


Judge Clears Medical Suit.—On January 17, 1955, Dr. Wm. A. Kopprasch, of Allegan, entered suit against

(Continued on Page 1622)


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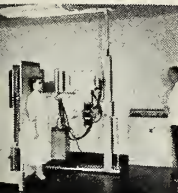
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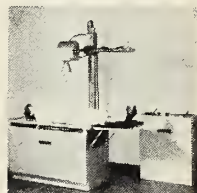
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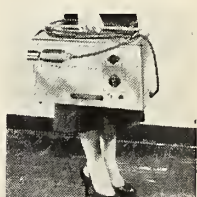
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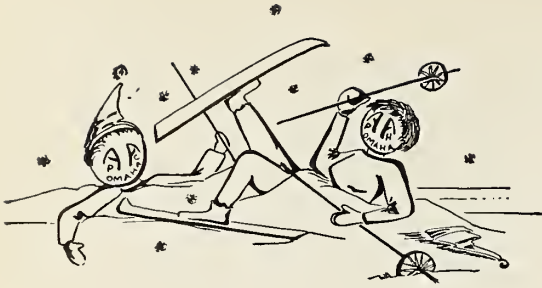
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(Continued from Page 1620)



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several groups alleging conspiracy to prevent his practicing medicine in Allegan Health Center and extensive damages amounting to \$705,000.00. He named the Michigan State Medical Society, the Michigan Hospital Association, the Allegan County Medical Society, the Allegan Health Center, and the members of these various groups. The case has been in the courts with numerous hearings and on October 10, Judge Raymond L. Smith dismissed the Michigan State Medical Society, the Michigan Hospital Association and the Allegan County Medical Society, as defendants. He also granted a motion by the defense attorneys to strike from the records the allegations of conspiracy. He will hear briefs and consider the balance of the case. Part of this action was an attempt by the doctor to force his membership on the staff of the Allegan Health Center, and force the Hospital to allow him to practice in it, alleging conspiracy damages of \$250,000 and losses of \$35,000 cash each year from 1943 to 1955.

* * *

Priceless Medical Books Lost.—The news bulletin of the National Library of Medicine for October, 1957, reports that on September 17 at the end of an eighteen-hour period during which more than two inches of rain fell on the Washington area, a tragedy of considerable proportions occurred at the National Library of Medicine. When the Library opened that morning, it was discovered that water was pouring out of the west basement stacks. Investigation disclosed that the torrent was a waste line running over stack-ranges containing 1808 to 1850 books in the C and D portions of the alphabet. All the available members of the circulation staff immediately pitched in to rescue what books they could. Some 400 volumes had been damaged. These were removed along with another 400 books from the vicinity. The final outcome is that about twenty-five volumes are so badly damaged as to be probably beyond all salvage. These included several volumes of Sir Astley Cooper's works, Abraham Colles' "Treatise On Surgical Anatomy—1811," Cloquet's Anatomy, Comet's Surgical Dictionary of 1829, and a hand-painted, illustrated edition of a pocket anatomy by Cooke. This points up the immediate demand for better housing of these priceless books.

* * *

The Medicare program, as of October 1, 1957, has been in operation for ten months and there are on record as participating in the Medicare program, 4,522 doctors of medicine, 625 doctors of osteopathy, and one doctor of dental surgery.

* * *

Blue Shield Membership.—As of June 30, 1957, Blue Shield membership in the United States, Porto Rico and Hawaii is 38,437,226 or 22.87 per cent of the population. Blue Shield members in Canada are 1,791,985 or 11.22 per cent of the population. This makes a total Blue Shield membership, 40,229,211. There are five states with more than 40 per cent of the population enrolled as Blue Shield members: Dela-

(Continued on Page 1624)



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(Continued from Page 1622)

ware, 62.52 per cent; District of Columbia, 55.24 per cent; Michigan, 48.15 per cent; Connecticut, 46.17 per cent, and Massachusetts, 42.75 per cent. Following closely are New York with 39.24 per cent; New Hampshire-Vermont, 38.93 per cent; Pennsylvania, 35.72 per cent; Indiana, 31.7 per cent; Colorado, 30.71 per cent; New Jersey, 30.4 per cent. In Canada, only one province, Manitoba, has over 30 per cent—that is 32.17 per cent. It is interesting to know that in the year 1956, the last full-year plans in the United States, Porto Rico and Hawaii paid to doctors, \$407,350,023.00, and in Canada, \$31,237,425.00, making a grand total of \$438,587,448.00. The first six months of 1957, that total figure was \$256,371,895.00. The Michigan Medical Service balance sheets for August 31, 1957, showed total payments to doctors for all services—medical-surgical plan, veterans plan and medicare—of \$253,369,359.53. Michigan Medical Service had passed the quarter of a billion dollar mark.

* * *

Service Audit Card.—During the month of August, Michigan Medical Service mailed out 50,213 service audit cards to subscribers for whom medical service bills had been paid. Of these, 13,483 were returned; 744 made unsatisfactory comment regarding Blue Shield, and 102 regarding Blue Cross. The most common complaint was that surgical benefits were not adequate (202), doctors charged in addition to Blue Shield (81), follow-up office care should be paid (56), first aid benefits not

adequate (35), x-ray benefits of basic contract not adequate (34), maternity benefits not adequate (33). If one considers the number who had a chance to complain (over 50,000) and the very meager number who did complain, the percentage is pretty good. However, it should be the ambition of the whole membership to see to it that there are no causes of complaint.

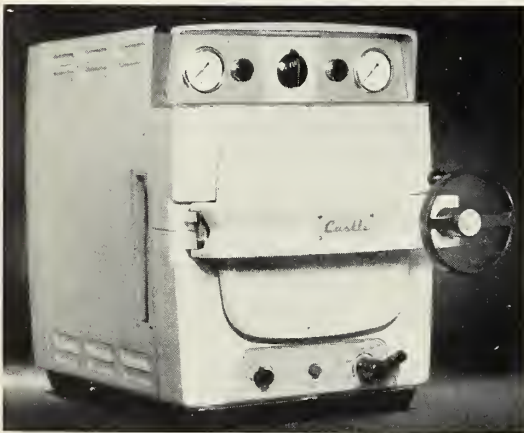
* * *

S. S. Keshishian, M.D., Honored.—More than 550 devoted patients, friends and colleagues of Dr. Keshishian gathered on September 22, 1957, at the Latin Quarter, Highland Park, for a testimonial dinner honoring this family doctor who for forty years has served this community faithfully. Many praises and tributes were given.

Among those present at the speakers' table were: James M. Robb, M.D., representing the medical profession; Hon. Paul Winkler, Mayor of Highland Park; Hon. Thomas C. Murphy, Wayne County Probate Judge; Hon. Joseph G. Rashid, Wayne County Circuit Judge; Kelley Keith, M.D., from Highland Park General Hospital. Several other prominent speakers from the other states and Canada were present.

* * *

Warning Against Allergic Reaction.—The American Foundation for Allergic Diseases in New York on October 4, cautioned physicians and their patients that allergic reactions may occur occasionally among those who are given the newly developed vaccine against Asian influenza, unless precautions are taken against



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such reactions. Only a few thousands out of the millions who are receiving the vaccine are allergic, but those sensitive to egg protein should take precautions. The reactions will be merely annoying to some, but some patients have had extreme sensitivity to egg protein which is found in some vaccine.

* * *

With today's improved methods of treatment Michigan hospital facilities for tuberculosis patients are serving more TB patients than formerly. One of the reasons for this is that the necessary period of hospitalization has been shortened.

At Michigan State Sanatorium, for example, the average period of hospitalization in 1946 was 351 days. Last year the average stay was 200 days. In 1946, there were 695 patients treated in the sanatorium. This increased to 837 patients in 1956. At the same time, the volume of outpatient services of Michigan State sanatorium increased markedly.

* * *

Public Opinion Survey.—The *Blue Shield Medical Care Plans Newsletter* for October, 1957, devotes two

pages to our Public Opinion Survey. We are quoting short selections:

"Conducted under the joint auspices of the Medical Society and Michigan Health Council, the survey represents one of the most comprehensive studies of its kind ever undertaken. In scope and detail, the Michigan Survey can easily be passed as monumental. That the doctors of the State ventured on such a research project is without question a milestone in leadership and will most certainly set an example which will undoubtedly be quickly emulated elsewhere.

"The study is . . . a clear cut demonstration of the medical profession's determination to assume leadership in shaping the course of medical care prepayment on the basis of what the public thinks. This is precisely the kind of active physician concern with the public viewpoint that is inescapable if the progress of voluntary medical care prepayment under medical leadership is to continue in serving the interest of both medicine and the public."

* * *

A Symposium on Fundamental Cancer Research (twelfth annual) will be held at the University of Texas Tumor Institute, Houston, Texas, March 6-7-8, 1958. For program and information, write Titus C. Evans, M.D., at the Tumor Institute, Texas Medical Center, Houston 25.

* * *

The fifth International Congress of Diseases of the Chest, sponsored by the American College of Chest Phy-

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sicians, will be held in Tokyo, Japan, September 7-11, 1958. For program, write the College at 112 East Chestnut Street, Chicago 11.

* * *

Wayne State University College of Medicine's newly established department of neurology has recently announced the following staff appointments: John Stirling Meyer, M.D., Department Chairman; Russell T. Costello, M.D., Clinical Professor; Z. Stephen Bohn, M.D., Clinical Assistant Professor; Jacob C. Chason, M.D., Associate Professor and Pathologist in Chief; Joseph L. Whalen, M.D., Clinical Assistant Professor; Joseph H. Chandler, M.D., Clinical Instructor. Chairman Meyer reports that a neurological teaching service has been established with a total of thirty-three neuromedical beds, fifteen in Detroit's Receiving Hospital and eighteen in Lafayette Clinic, adjacent to the College of Medicine Science building.

* * *

Chicago Ophthalmological Society will hold its annual Clinical Conference at the Drake Hotel, Chicago, February 21-22, 1958. For program, write the Registrar at 1150 North Lorel Avenue, Chicago 51.

* * *

William D. Robinson, M.D., Ann Arbor, has been appointed to the National Advisory Arthritis and Metabolic Disease Council, as announced by USPHS Surgeon General L. E. Burney, M.D.

Congratulations, Doctor Robinson!

* * *

Robert G. Lovell, M.D., has been appointed Assistant Dean of the University of Michigan Medical School, to replace the late Wayne Whittaker, Ph.D., Charles J. Tupper, M.D., has been appointed Secretary of the Medical School.

* * *

"Grand Rounds" of November 13 was a spectacular progress report on Coronary Disease, presented nationally by means of closed circuit television—the sixth in the "Grand Rounds" series of telecasts under the sponsorship of Upjohn Company of Kalamazoo, Michigan. Discussed were three key questions in coronary disease: (1) What is the place and value of surgery? (2) What is the role of dietary fat? (3) Is long-term anticoagulation worthwhile? The Michigan outlets of live ninety-minute closed circuit "Grand Rounds" were Detroit (Rackham Educational Memorial Auditorium) and Kalamazoo (Upjohn Company plant).

* * *

The University of Cincinnati's Institute of Industrial Health offers graduate fellowships in industrial medicine for graduates of approved medical schools who have completed at least one year of internship. The three-year course of instruction leads to the degree of Doctor of Science in Industrial Medicine. Stipends for the first two years vary from \$3,000 to \$4,000, depending on marital status. In the final or residency year, a Fellow is compensated by the organization in which he is completing his training. For full information, write Secretary, Institute of Industrial Health, College of Medicine, Eden and Bethesda Avenues, Cincinnati 19, Ohio.

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International Relations.—The St. Clair County Medical Society in its *Information Bulletin* always invites attention to the meetings and clinic days of the Lambton County Medical Society of Ontario (Sarnia). It also mails the programs of Lambton County Medical Society to the St. Clair Members. Congratulations!

* * *

The finding that 7.2 per cent of the patients in a tuberculosis sanatorium have "serologically proved" histoplasmosis and that the actual presence of the micro-organism was demonstrated in 33 per cent of the cases is indeed remarkable. It certainly calls for very serious consideration of the importance of histoplasmosis in tuberculosis sanatoriums.—MICHAEL L. FURCOLOW and CHARLES A. BRASHER, M.D., *American Review of Tuberculosis*, May, 1956.

* * *

The big trouble with the world is that the stupid are cocksure and the intelligent full of doubt.—*Bertrand Russell*.

* * *

He who only plans is a dreamer; he who only works is a drudge; but he who plans and works his plans is a conqueror.—*Life Association News*.

* * *

The wise men of antiquity, when they wished to make the whole world peaceful and happy, first put their own states into proper order. Before putting their states into proper order, they regulated their own families. Before regulating their families, they regulated themselves. Before regulating themselves, they tried to be sin-

cere in their thoughts. And before being sincere in their thoughts, they tried to see things exactly as they really were.—*Confucius*.

* * *

E. R. Jennings, M.D., Detroit, was elected Vice President of the American Association of Blood Banks at its tenth anniversary meeting in Chicago.

Congratulations, Doctor Jennings!

* * *

The twenty-first annual meeting of the New Orleans Graduate Medical Assembly will be held March 3-4-5-6, 1958, Roosevelt Hotel, New Orleans. For program, write Maurice E. St. Martin, M.D., Secretary, Room 103, 1430 Tulane Avenue, New Orleans 12, Louisiana.

* * *

Col. Richard D. Mudd, Saginaw, is serving a special two-week tour of active service visiting United States Air Forces in Europe bases in Germany, France and England.

* * *

Harvey V. Higley has notified the President of his desire to be released from his position as Administrator of Veterans Affairs. Mr. Higley has been VA Administrator since 1953 and now plans to return to his home in Marinette, Wisconsin.

* * *

H. M. Pollard, M.D., Ann Arbor, Secretary-General of the World Congress of Gastroenterology, announces the Congress will hold its 1958 meeting in Washington, D. C., at the Sheraton-Park Hotel, May 25-31.

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The fifty-third annual meeting of the American Trudeau Society is scheduled for May 19-21 in Philadelphia, Pennsylvania. For program, write Ellen Lovell, Director, Public Relations, National Tuberculosis Association, 1790 Broadway, N. Y. C. 19.

* * *

Copies of "Be Safe at Home" are now available at new low prices from Miss Ernestine B. Davidson, Detroit Society for the Prevention of Blindness, Inc., 1401 Ash Street, Detroit 8, Michigan. Single copy—35 cents; 2 to 49 copies—25 cents each; 50 to 99 copies—20 cents each; and over 100 copies—15 cents each.

* * *

Creation of a new Department of Industrial Health and the abolition of the Department of Tropical Diseases in the University of Michigan School of Public Health was approved by the Regents at their November meeting. Personnel now in the Department of Tropical Diseases will be transferred to the Department of Epidemiology, headed by Thomas Francis, Jr., M.D.

* * *

The Board of Missions of the Methodist Church has announced a need for twenty doctors in its mission fields in ten countries overseas in 1958. The openings cover a varied range of medical fields, including internal medicine, surgery, general practice, public health, gynecology, pathology and radiology. For complete information, write the Board through its Office of Missionary Personnel, 150 Fifth Avenue, New York 11, N. Y.

* * *

Postgraduate course on diseases of the chest is being offered by the Council on Postgraduate Medical Education of the American College of Chest Physicians, Warwick Hotel, Philadelphia, March 3-7, 1958. The tuition fee is \$75 including round table luncheons. For information, write to the Executive Director, American College of Chest Physicians, 112 East Chestnut Street, Chicago 11, Illinois.

* * *

Morton Hack, of Detroit, has been elected President of the Hack Shoe Company, succeeding his father, Nathan Hack, who becomes Chairman of the Board of the firm. Leonard Hack becomes Vice President-Treasurer.

Congratulations and best wishes, Morton Hack!

Grover C. Penberthy, M.D., Detroit, has been made a member of the Detroit City Plan Commission by Mayor Miriani.

Congratulations, Doctor Penberthy!

* * *

A 60 per cent cut in administrative costs during the last ten years, totaling more than a quarter of a billion dollars, has been reported by Veterans Administration. VA ascribed the reduction to several factors, including reduced work-loads, expiration of programs, mechanization of administrative operations, greater experience and productivity of employees, and lower Congressional appropriations.

* * *

The ninth Selby Discussional was held at the University of Michigan, Ann Arbor, December 6-7. Formerly called the Ann Arbor Discussional, the conference is now named after C. D. Selby, M.D., retired medical director of the General Motors Corporation. Speakers were: Carl E. Badgely, M.D., James W. Rae, M.D., and Gerritt Schepers, M.D., all of Ann Arbor.

* * *

The increasing importance of written medical communications is being stressed at the 1958 "Schering Award" competition recently opened to medical students in the United States and Canada. The "Schering Award" was originated by the Schering Corporation in 1940. A total of \$5,700 in cash prizes, plus many honorable mention prizes will be awarded for entries. The three subjects selected are: "The Mechanism and Current Concepts of Treatment of Nausea and Vomiting," "Current Trends in Corticosteroid Therapy in Pediatrics," and "The Use of Tranquilizer Therapy in Office Practice."

Entry blanks and contest rules are available in all medical schools.

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Community Health Association.—*The Los Angeles County Medical Society Bulletin* for September 5, 1957, contained the second of two two-page spreads concerning the Community Health Association, giving some details of its structure and operation. The editor makes this introduction:

"In this issue, we present a synopsis of the Community Health Association initiated in Detroit under the aegis of the United Auto Workers. This plan, which its sponsors say is competitive with Blue Cross-Blue Shield and private carriers, is designed specifically for a great industrial city and is very likely to be the forerunner of a comprehensive medical insurance plan for Los Angeles."

The listing of the Board of Directors is very intriguing. It starts with Edgar F. Kaiser, President Kaiser Industries; James A. Lewis, Vice President, University of Michigan; Circuit Judge Wade H. McCree, Jr.; Walter P. Reuther; Joseph Verhelle, banker; Rabbi Morris Adler; Rev. Fr. John A. Trese, hospital co-

ordinator of the Catholic Archdiocese; and the Rev. Elmer B. Usher, Director of the Department of Christian Social Relations of the Episcopal Diocese of Michigan. In various parts, it is specified that complete services will be given and there will be no extra charge. The subscriber will know absolutely what his medical costs are going to be.

"To assure the promotion and maintenance of a high quality of medical and hospital care, there must be: (a) standards of qualifications for physicians in groups which serve CHA members; (b) standards for hospital and medical group facilities and equipment; (c) standards for medical practice to be set with competent medical advice and enforced by the medical director and staff; (d) provision for continuing education of professional personnel; (e) periodic evaluation of quality.

"Every member of the association should have the opportunity and should be encouraged to select a personal physician from among CHA participating doctors.

"There shall be no lay interference by the pre-payment plan in purely medical matters." (Section C and E above are an answer to that. There is a medical director who will direct the medical program.)

"Non-medical matters are a valid concern of consumers. A health plan in recognition of its responsibilities to the public interest should give the plan subscribers an adequate voice in non-medical affairs."

EDITOR'S NOTE.—The above news item is quoted with some notations or emphasis from the *Bulletin of the Los Angeles County Medical Society*, pointing out an evident extension of the Community Health Association program which could be just as serious as a federally sponsored one and could lead to a federal plan.

THE DOCTOR'S LIBRARY

Acknowledgments of all books received will be made in this column, and this will be deemed by us as full compensation to those sending them. A selection will be made for review, as expedient.

BOOKS RECEIVED

MEDICINE, OPTOMETRY AND THE PUBLIC WELFARE. A Report to the Medical Profession. Issued by The National Medical Foundation for Eye Care.

EXPECTANT MOTHERHOOD. By Nicholson J. Eastman, M.D., Professor of Obstetrics in Johns Hopkins University; Obstetrician-in-Chief to the Johns Hopkins Hospital. Third edition, revised. Boston: Little, Brown and Company, 1957. Price \$1.75.

THE PHILOSOPHY OF MEDICINE. By William R. Laird, M.D., Medical Foundation, Inc. Charleston, West Virginia, 1956.

THE PATIENT SPEAKS. Mother Story Verbatim in Psychoanalysis of Allergic Illness. By Harold A. Abramson, M.D., Associate Attending Physician and Chief of the Allergy Clinic, the Mount Sinai Hospital, New York City; Research Psychiatrist, Biological Laboratory, Cold Spring Harbor; Consultant, Huntington Hospital; Assistant Clinical Professor of Physiology, Columbia University; Consultant (Psychology) Department of the Army. New York: Vantage Press, 1956. Price \$3.50.

CARE OF THE LONG TERM PATIENT. Chronic Illness in the United States. Volume II. Commission on Chronic Illness. Published for the Commonwealth Fund. Cambridge, Massachusetts: Harvard University Press, 1956. Price \$8.50.

OCCUPATIONAL HEALTH NURSING. By Mary Louise Brown, R.N., M.A., Assistant Professor of Public Health, Yale University School of Medicine, in association with John Woster Meigs, M.D., Associate Professor of Public Health, Yale University School of Medicine. New York: Springer Publishing Company, Inc., 1956. Price \$4.50.

MEDICINE IN CHICAGO, 1850-1950. A Chapter in the Social and Scientific Development of a City. By Thomas Neville Bonner. Madison, Wisconsin: The American History Research Center, 1957. Price \$5.00.

GUIDE TO MEDICAL WRITING. A Practical Manual for Physicians, Dentists, Nurses, Pharmacists. By Henry A. Davidson, M.D., Editor. *Journal of the Medical Society of New Jersey.* New York: The Ronald Press Company, 1957. Price \$5.00.

THE FIGHT FOR FLUORIDATION. By Donald R. McNeil. New York: Oxford University Press. Price \$5.00.

THE HAPPY LIFE OF A DOCTOR. By Roger I. Lee, M.D. Illus. Boston: Little, Brown and Company, 1957. Price \$4.00.

CIBA FOUNDATION SYMPOSIUM ON PAPER ELECTROPHORESIS. Editors for the Ciba Foundation, G. E. W. Wolstenholme, O.B.E., M.A., M.B., B.Ch., and Elaine C. P. Millar, A.H.-W.C., A.R.I.C. 74 illustrations. Boston: Little, Brown and Company, 1957. Price \$6.75.

CLINICAL EXAMINATIONS IN NEUROLOGY. By Members of the Sections of Neurology Section of Physiology, Mayo Clinic and Mayo Foundation for Medical Education and Research, Graduate School, University of Minnesota, Rochester, Minnesota. James A. Barston, M.D.; Reginald G. Bickford, M.D.; Joe R. Brown, M.D.; Edward C. Clark, M.D.; Kendall B. Corbin, M.D.; David D. Daly, M.D.; Lee M. Eaton, M.D.; Norman P. Goldstein, M.D.; Edward H. Lambert, M.D.; Clark H. Millikan, M.D.; Donald W. Mulder, M.D.; Harry L. Parker, M.D.; E. Douglas Rooke, M.D.; Joseph G. Rushton, M.D.; Robert G. Siekert, M.D.; Jack P. Whisnant, M.D. Philadelphia and London: W. B. Saunders Company, 1956.

MAY'S MANUAL OF THE DISEASES OF THE EYE. For Students and General Practitioners. Twenty-second edition. Revised and edited by Charles A. Perera, M.D., Associate Clinical Professor, College of Physicians and Surgeons, Columbia University, New York; Attending Ophthalmologist, Presbyterian Hospital, New York; Consultant in Ophthalmology, Vassar Brothers Hospital, Poughkeepsie, New York. 378 illustrations, including 32 plates with 93 colored figures. Baltimore: The William and Wilkins Company, 1957. Price \$6.00.

This very popular manual is a condensed but explicitly told review of the whole field of ophthalmology, as have been its many predecessors. The size has not been changed, but much of the text has been changed and some illustrations have been added. It is really fascinating reading. Its popularity is attested to by the fact that this is the twenty-second edition and that most of the previous editions were reprinted once or twice. There have also been eleven British editions, most of them reprinted; twelve Spanish editions, six French editions, seven Italian editions, two Dutch editions, two German editions, two Japanese editions, four

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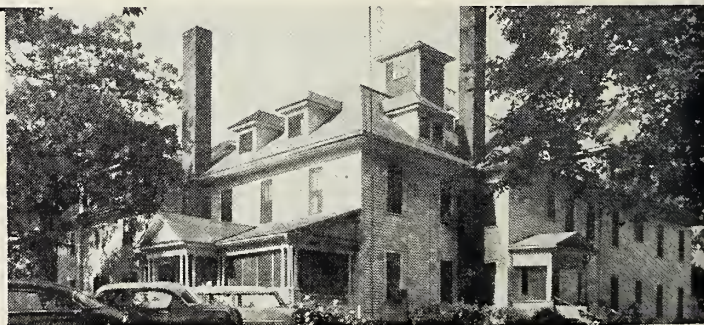
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Chinese editions, three Portuguese editions, and one Urdu (Indian) edition. We are just as pleased with this book as we have been with many of the previous editions and know others will be equally pleased.

IT PAYS TO BE HEALTHY. A World-Renowned Physician Guides You to Success, Happiness, and Health in Your Work. By Robert Collier Page, M.D., F.A.C.P. Englewood Cliffs, N. Y.: Prentice-Hall, Inc., 1957. Price \$4.95.

Doctor Page has spent many years in directing the medical care of people in industry. He starts out in the very first paragraph by saying that anyone who is earning a living for himself and his family finds it a challenge to keep pace with the standard of living that always seems to be two jumps ahead. This holds true, whether he is in the \$3,000, \$5,000, \$10,000 or \$50,000 a year bracket. In other words, he is always under pressure.

The book is well written in a conversational style drawing from the doctor's experience and telling the reader what to do to preserve good health, how to arrange his work, how to avoid tension and ulcers. To illustrate points, the author quotes histories of patients he has had who have solved problems. The whole theory of his work, is that if a person is to be a success he must be in good health, and he can be in good health if he follows certain definite rules and regulations which are not specified distinctly, but are hinted at.

The author winds up with a suggestion for the retirement age. He has followed his patient all the way

from birth through the seven areas of living according to Shakespeare, and makes suggestions of how to prepare for the years after he has stopped his regular outline of work. When you finish the book you feel as though you had had a long visit with Doctor Page, with a sense of being much rewarded.

FROM STERILITY TO FERTILITY. A Guide to the Causes and Cure of Childlessness. By Elliot E. Philipp, M.A., M.B., B.Chir., F.R.C.S., M.R.C.O.G. New York: Philosophical Library Publishers (15 East 40th Street), 1957. Price \$4.75.

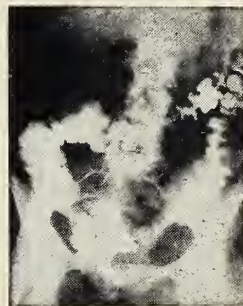
This book is primarily for the lay public but is useful to the physician and nurse as a means of simple education to the problems of infertility. It is a guide for newly married couples and those who have wanted children but who have not been able to produce any. Through its diagrams, charts and actual case reports, it points the way for the lay person to obtain the help they need. It further points out the pitfalls individuals can avoid, and finally explains the problems of adoption and the correct way of going about adopting a child. The book has an excellent bibliography for all interested in this and allied subjects.

J.R.P.

STEDMAN'S MEDICAL DICTIONARY. Words used in medicine with their derivations and pronunciation including dental, veterinary, chemical, botanical, and other special terms; anatomical tables of titles in general use, the terms sanctioned by the Basle Anatomical Convention; the New British Anatomical Nomenclature Congress of Anatomists; Pharmaceutical

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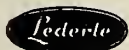
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preparations official in the U. S. and British Pharmacopoeias or contained in the National Formulary; biographical sketches of figures in the history of medicine. Nineteenth revised edition, with Etymology and Orthographic Rules. Edited by Norman Burke Taylor, V.D., M.D., F.R.S.C., F.R.C.S. (Edin.) F.R.C.P. (Can.) M.R.C.S. (Lon.), University of Western Ontario, formerly of the University of Toronto. In collaboration with Lieut. Col. Allen Ellsworth Taylor, D.S.O., M.A., Classical Editor. Baltimore: The Williams and Wilkins Company, 1957.

This volume is practically an unabridged medical dictionary. Words used in medicine are constantly being added, and this book has gone through and reached its nineteenth edition with about 1656 pages. It is very well printed, two columns, with thumb indexes for every second letter. To a person who hopes to keep anywhere near up to date in medicine, this dictionary is a necessity. The words are all set out in black face type, easy to distinguish from the regular text.

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Communications

Dear Doctor Haughey:

Relative to the termination of the TPI diagnostic service at the Hospital in Ann Arbor, we have attempted to notify physicians and institutions in the state that the tests are no longer performed here but our coverage is very incomplete. Physicians continue to send patients or specimens to us and we have to turn them down. Since this is an unnecessary waste of time and money for everyone involved, we would be most grateful if you could find the space to include this brief comment in *THE JOURNAL* of the Michigan State Medical Society at the earliest opportunity.

My sincere thanks for whatever immediate help you can give us in disseminating this information throughout the state.

Sincerely yours,
A. H. WHEELER, DR. P. H.
Assistant Professor of Bacteriology
University of Michigan

Ann Arbor, Michigan
November 8, 1957

* * *

Dear Doctor Haughey:

The Illinois Committee on Maternal Welfare announces the Second Illinois Congress on Maternal and Infant Care to be held at the Hotel Pere Marquette, Peoria, February 4 through 6, 1958. "Illinois Moves Forward in Maternal and Infant Care" has been chosen as the theme for this unique two-and-one-half day meeting. Topics will revolve around the inter-professional approach to maternal and infant care, and all interested health professions are being invited to participate in the program.

The Second state Congress will offer a comprehensive program of panel discussions, breakfast and luncheon conferences, and round tables to enable the maximum number of persons to participate in small group discussions. A highlight of the Congress will be the Banquet February 5, featuring an address by The Honorable Otto Kerner, Judge, County Court of Cook County, Chicago.

We hope you will help us to reach physicians who may be interested in attending the Second Congress by an announcement in your *Journal*, especially all persons concerned with the care of mothers and babies in order that they may have the opportunity to participate in this "team-approach" to their problems.

Sincerely yours,
DEANE M. FARLEY, M.D.
General Chairman
2nd Illinois Congress

Chicago, Illinois
November 9, 1957

A VACANCY FOR MEDICAL RESIDENT will be open next February to a physician graduated from Class A medical school, interested in tuberculosis, possessing either temporary or permanent Michigan state license. Salary ranges between \$9,500 and \$12,000 per annum, varying with experiences and years of service here. An apartment, furnished with heat, electrical cooking range, electricity and refrigerator, at \$40.00 monthly rent, is available. Group insurance, social security, old age pension, sick leave and vacations are offered. Please apply to Medical Director, Oakland County Tuberculosis Sanatorium, Pontiac, Michigan.

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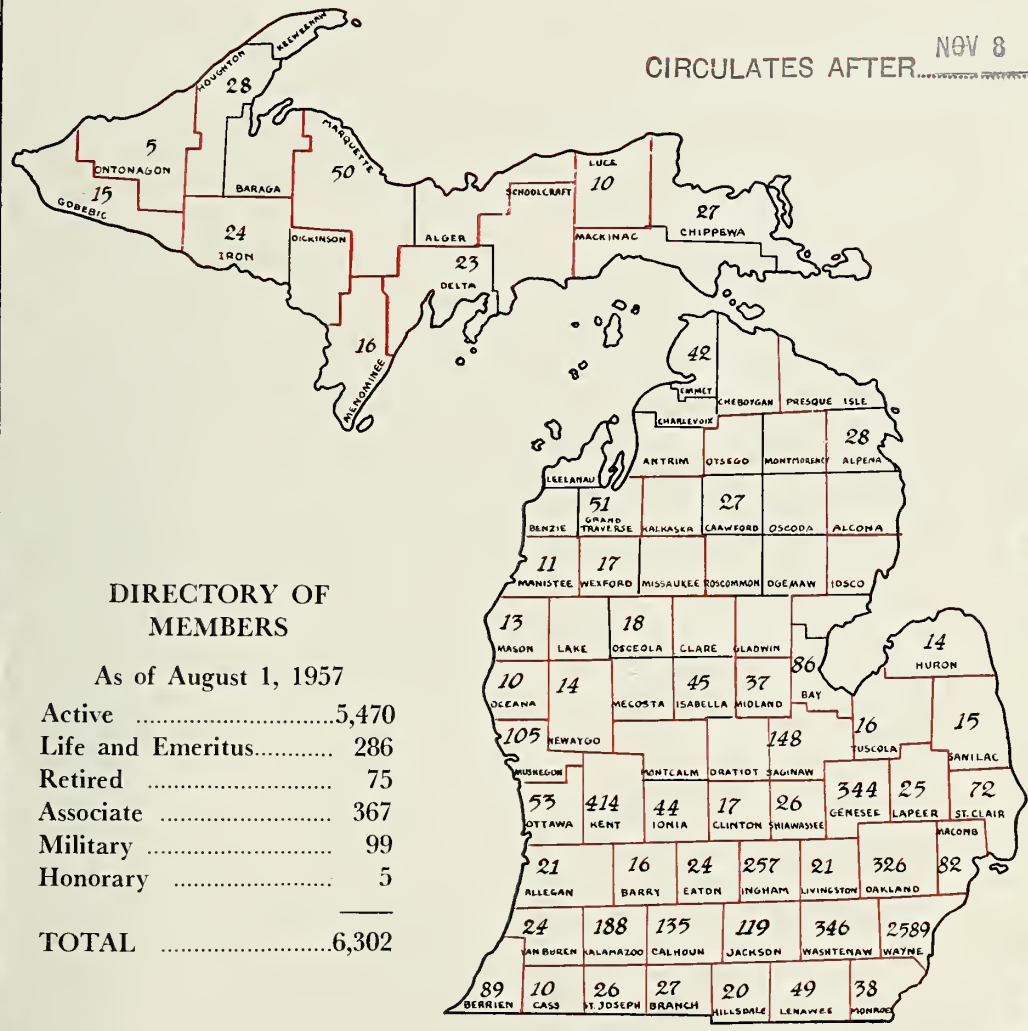
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DIRECTORY OF MEMBERS

As of August 1, 1957

Active	5,470
Life and Emeritus.....	286
Retired	75
Associate	367
Military	99
Honorary	5
TOTAL	6,302

In 1956

BLUE CROSS-BLUE SHIELD

*provided a record \$141,000,000
worth of hospital and medical services
needed by Michigan members!*

Your Michigan Blue Cross and Blue Shield Plans are continuing to provide more benefits for more people than ever before. These two Plans—sponsored by Michigan's doctors and hospitals—are the overwhelming choice of the people of Michigan when it comes to realistic protection against the cost of hospital and medical care. Over 3,600,000 Michiganders have chosen Blue Cross-Blue Shield and they represent half the families in the State.

During 1956, Michigan Blue Cross provided nearly \$99,000,000 worth of hospital care needed by more than half a million of its members. Michigan Blue Shield, the companion Plan for medical-surgical protection, provided more than \$42,000,000 worth of medical-surgical care involving 1,200,000 doctors' services.

Last year also revealed a growing public preference for the broadest Blue Shield coverages offered. More than 75 per cent of all members now are enrolled for in-hospital medical care. Virtually half have added supplemental X-ray-EKG benefits and over 55 per cent are enrolled under the higher \$5,000 family income contract which is now offered by more than 10,000 groups.

The public acceptance of Blue Cross-Blue Shield is a tribute to the progressive thinking of you who make Blue Cross-Blue Shield a dynamic program—the nearly 4,900 participating doctors and 225 participating hospitals in Michigan. The doctors and hospitals of Michigan can be proud of the way their joint Plans are continuing to meet the increased health-care needs of the public.



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Michigan Medical Service

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Cities of 1,000 Population or More With County Designation

CITY	COUNTY	CITY	COUNTY
Adrian	Lenawee	Decatur	Van Buren
Albion	Calhoun	Detroit	Wayne
Algonac	St. Clair	Detroit Beach	Monroe
Allegan	Allegan	Dexter	Washtenaw
Alma	Graiot	Dowagiac	Cass
Almont	Lapeer	Dundee	Monroe
Alpena	Alpena	Durand	Shiawassee
Anchor Bay Gardens	Macomb		
Ann Arbor	Washtenaw	East Ann Arbor	Washtenaw
Austin Lake	Kalamazoo	East Detroit	Macomb
		East Grand Rapids	Kent
Bad Axe	Huron	East Jordan	Charlevoix
Bangor	Van Buren	East Lansing	Ingham
Battle Creek	Calhoun	Eastlawn	Washtenaw
Bay City	Bay	East Tawas	Iosco
Belding	Ionia	Eaton Rapids	Eaton
Belleville	Wayne	Ecorse	Wayne
Bellevue	Eaton	Englewood Park	Calhoun
Benton Harbor	Berrien	Escanaba	Delta
Benton Heights	Berrien	Essexville	Bay
Berkley	Oakland	Evart	Osceola
Berrien Springs	Berrien		
Bessemer	Gogebic	Fair Plain	Berrien
Big Rapids	Mecosta	Farmington	Oakland
Birmingham	Oakland	Fenton	Genesee
Blissfield	Lenawee	Ferndale	Oakland
Bloomfield Hills	Oakland	Ferrysburg	Ottawa
Boyer City	Charlevoix	Flat Rock	Wayne
Brighton	Livingston	Flint	Genesee
Bronson	Branch	Flushing	Genesee
Brookline	Jackson	Fowlerville	Livingston
Brownlee Park	Calhoun	Frankenmuth	Saginaw
Buchanan	Berrien	Frankfort	Benzie
Bullock Creek	Midland	Fraser	Macomb
Cadillac	Wexford	Galesburg	Kalamazoo
Calumet	Houghton	Garden City	Wayne
Capac	St. Clair	Gaylord	Otsego
Carleton	Monroe	Gladstone	Delta
Caro	Tuscola	Gladwin	Gladwin
Carrollton	Saginaw	Grand Haven	Ottawa
Carson City	Montcalm	Grand Ledge	Eaton
Caspian	Iron	Grand Rapids	Kent
Cass City	Tuscola	Grandville	Kent
Cassopolis	Cass	Grayling	Crawford
Cedar Springs	Kent	Greenville	Montcalm
Center Line	Macomb	Grosse Pointe	Wayne
Charlevoix	Charlevoix	Grosse Pointe Farms	Wayne
Charlotte	Eaton	Grosse Pointe Park	Wayne
Cheboygan	Cheboygan	Grosse Pointe Shores	Wayne & Macomb
Chelsea	Washtenaw	Grosse Pointe Woods	Wayne & Macomb
Chesaning	Saginaw		
Clare	Clare	Hamtramck	Wayne
Clawson	Oakland	Hancock	Houghton
Clinton	Lenawee	Harbor Beach	Huron
Clio	Genesee	Harbor Springs	Emmett
Coldwater	Branch	Hart	Ocean
Coloma	Berrien	Hartford	Van Buren
Colon	St. Joseph	Hastings	Barry
Columbus Grove	Monroe	Hazel Park	Oakland
Commerce	Oakland	Highland Park	Wayne
Constantine	St. Joseph	Hillsdale	Hillsdale
Coopersville	Ottawa	Holland	Ottawa
Corunna	Shiawassee	Holly	Oakland
Croswell	Sanilac	Homer	Calhoun
		Houghton	Houghton
Davison	Genesee	Howell	Livingston
Dearborn	Wayne	Hubbell	Houghton

<i>CITY</i>	<i>COUNTY</i>
Sparta	Kent
Springfield Place	Calhoun
Spring Lake	Ottawa
Stambaugh	Iron
Standish	Arenac
Stanton	Montcalm
Stockbridge	Ingham
Sturgis	St. Joseph
Sunrise Heights	Calhoun
Sylvan Lake	Oakland
Tawas City	Iosco
Tecumseh	Lenawee
Temperance	Monroe
Three Rivers	St. Joseph
Traverse City	Grand Traverse
Trenton	Wayne
Union City	Branch & Calhoun
Utica	Macomb
Vandercook Lake	Jackson
Van Dyke	Macomb

<i>CITY</i>	<i>COUNTY</i>
Vassar	Tuscola
Vicksburg	Kalamazoo
Virginia Park	Ottawa
Wakefield	Gogebic
Walled Lake	Oakland
Watervliet	Berrien
Wayland	Allegan
Wayne	Wayne
Wenona Beach	Bay
West Branch	Ogemaw
Whitehall	Muskegon
White Pigeon	St. Joseph
Willow Run	Washtenaw
Woodlawn Orchards	Jackson
Woodville	Jackson
Wyandotte	Wayne
Yale	St. Clair
Ypsilanti	Washtenaw
Zeeland	Ottawa
Zilwaukee	Saginaw



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Michigan State Medical Society

Directory of Members, 1957

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ALLEGAN COUNTY

Brachman, A. P.....	222 Trowbridge St., Allegan	Kromer, Robert A.....	Wayland
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Chase, Walter E. (A).....	2608 Marshall, Little Rock, Ark.	Medill, Wilbur C.....	Plainwell
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DeWitt, D. E.....	160 Taylor St., Saugatuck	Mitchell, A. B.....	Allegan
Dickinson, Clyde A.....	Wayland	Ramseyer, Gladwin E.....	Plainwell
Everett, D. W.....	Plainwell Sanitarium, Plainwell	Schneider, H. E.....	111½ Locust St., Allegan
Goude, A. G.....	Hopkins	Topp, Elwin W.....	Plainwell
Johnson, E. B.....	412 Water St., Allegan	Van Der Kolk, Bert.....	Hopkins
Johnson, H. H. (R).....	Wayland	Vaughan, W. R.....	Plainwell
		Wiseman, Bertha C.....	P.O. Box 177, Allegan

ALPENA COUNTY

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Thapin, Frederick J.....	101 W. John St., Bay City	Ellison, Alfred.....	101 W. John St., Bay City

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 Kessler, Saba.....201 Shearer Bldg., Bay City
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 Woodburne, H. L.....Davidson Bldg., Bay City
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 Ziliak, A. L.....3393 Kiesel Road, Bay City

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 Cilella, S. G.....Pawating Hospital, Niles
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 Eidson, Hazel D.....Berrien Springs
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 Emery, W. K.....1020 Niles Ave., St. Joseph
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 Ruth, J. G.....925 Pipestone St., Benton Harbor

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 Zick, L. H.....1626 Langley Ave., St. Joseph

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 Culver, Dean T.....78 Division, Coldwater
 Fraser, R. J.....22 W. Pearl St., Coldwater
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 Moss, H. L.....292 E. Chicago St., Coldwater
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 Smith, R. E.....304 N. Broadway, Union City
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 Weidner, H. R.....50 Division St., Coldwater

CALHOUN COUNTY

Albright, A. A.....401 Security Bank Bldg., Battle Creek
 Allen, G. S.....American Legion Hosp., Battle Creek
 Allen, R. H.....191 College, Battle Creek
 Amos, Norman H.....1704 Wolverine Tower, Battle Creek
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 Bakken, Richard L.....719 Capital Ave. S.W.,
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 Berghorst, John (A).....VA Hospital, Battle Creek
 Beuker, Herman.....120 E. Michigan Ave., Marshall
 Bodine, Harold R.....716 Michigan Nat'l Bank Bldg.,
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 Bonifer, P. P.....231 North Ave., Battle Creek
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 Brown R. W.....203 Capital Ave. N.E., Battle Creek
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 Campbell, Jack.....611 Michigan Nat'l Bank, Battle Creek
 Campbell, Richard J.....140 Capital Ave. N.E.,
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 Chandler, Edward M.....1407 Security Bank Bldg.,
 Battle Creek
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 Coakes, J. E.....112 W. Mansion, Marshall
 Colquhoun, Graham F.....401 Security Tower,
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 Daly, Miriam S.....203 Irwin, Albion
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 Fisher, R. E.....158 Capital Ave. N.E., Battle Creek

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 Gilfillan, Margery J. (L).....Battle Creek Sana.,
 Battle Creek
 Gorsline, C. S. (L).....85 Orchard Place, Battle Creek
 Graubner, F. L.....Marshall
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 Battle Creek
 Hansen, E. L.....216 North Ave., Battle Creek
 Hansen, Harvey C.....417 Post Bldg., Battle Creek
 Haughey, Wilfrid (L).....610 Post Bldg., Battle Creek
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 Henderson, Philip M.....109 West Erie St., Albion
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 Herzer, Henry A. (L).....208 Irwin Ave., Albion
 Hibbs, Donald K.....622 Post Bldg., Battle Creek
 Holtom, B. G.....815 Security Bank Bldg., Battle Creek
 Hoyt, A. A. (L).....141 N. Merwood Dr., Battle Creek
 Hubly, James W.....1407 Security Nat'l Bank Bldg.,
 Battle Creek
 Humphrey, A. E.....122 N. Madison, Marshall
 Humphrey, Arthur A.....1602 Security Tower,
 Battle Creek
 Jeffrey, J. R.....Battle Creek Sana., Battle Creek
 Jones, Aubrey H. (A).....Neuro Psychiatric Institute,
 University Hospital, Ann Arbor
 Jones, E. F. (A).....VA Hospital, Battle Creek
 Jones, T. K.....118 W. Green St., Marshall
 Keagle, Leland R.....196 North Ave., Battle Creek
 Keeler, K. B.....205½ S. Superior St., Albion
 Kelleher, George T.....613 Post Bldg., Battle Creek
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 Kingsley, Paul C.....191 College, Battle Creek
 Klopp, E. J.....1407 Security Bank Bldg., Battle Creek
 Kolvoord, Theodore (R).....47 Minges Rd., Battle Creek
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 Fort Custer
 Lam, Francis L.....408½ Capital S.W., Battle Creek
 Lancaster, V. B.....231 North Ave., Battle Creek

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 Levy, Joseph, Jr.,.....231 North Ave., Battle Creek
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 Lowe, S. T.....231 North Ave., Battle Creek
 Lynk, S. M. (A).....VA Hospital, Battle Creek
 MacGregor, Archibald E. (L).....1510 Security Bank Bldg., Battle Creek
 Marino, S. G. (A).....VA Hospital, Battle Creek
 McCuaig, A. G.....719 S.W. Capital Ave., Battle Creek
 Meister, F. O.....806 Security Tower, Battle Creek
 Melges, Fred J.....1506 Security Bank Bldg., Battle Creek
 Mercer, C. M.....512 Michigan Nat'l Bank Bldg., Battle Creek
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 Morrison, Donald B.....719 S.W. Capital Ave., Battle Creek
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 Norgan, Anne (A).....VA Hospital, Battle Creek
 Olsen, A. L. (A).....VA Hospital, Battle Creek
 Orr, E. H. (A).....VA Hospital, Battle Creek
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 Patrick, Gilbert T.....505 Security Bank Bldg., Battle Creek
 Pearson, Donald J.....255 North Ave., Battle Creek
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 Robbert, John.....191 College, Battle Creek
 Robins, Hugh B.....237 Fremont, Battle Creek
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 Royer, Clark W.....1331 W. Michigan Ave., Battle Creek
 Sandy, W. A. (A).....VA Hospital, Battle Creek

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 Sharp, A. D. (R).....308 S. Superior, Albion
 Sharp, W. T. (A).....VA Hospital, Battle Creek
 Shellenberger, Herbert M.....108½ W. Michigan, Marshall
 Shipp, Leland P.....1414 Security Bank Bldg., Battle Creek
 Sibilsky, A. Clark (A).....Veterans Administration, Battle Creek
 Simpson, Robert S.....1507 Wolverine Tower, Battle Creek
 Slagle, George W.....203 Capital Ave. N.E., Battle Creek
 Smith, J. S. (A).....VA Hospital, Battle Creek
 Spencer, C. M.....308½ S. Superior St., Albion
 Stadle, Wendell H. (R).....607 Jennings Landing, Goguac Lake, Battle Creek
 Stephenson, C. Douglas.....140 Capital Ave. N.E., Battle Creek
 Stiefel, Richard A.....1407 Sec. Bank Bldg., Battle Creek
 Strohmenger, Frank J.....400½ S. Superior St., Albion
 Tannenholz, Harold S.....1614 Security Bank Bldg., Battle Creek
 Taylor, Clifford B.....308½ S. Superior St., Albion
 Tazelaar, Myron A.....219 N. Madison, Marshall
 Vander Kamp, Harry (A).....VA Hospital, Battle Creek
 VanderVoort, Wm. V. (L).....Battle Creek San., Battle Creek
 VanZandt, M. M. (A).....Federal Civil Defense, Battle Creek
 Verity, Lloyd E.....806 Security Tower, Battle Creek
 Walker, Charles S.....709 W. Van Buren, Battle Creek
 Walters, John F.....41 N. Washington, Battle Creek
 Way, Kenneth E.....111 N. Jefferson St., Marshall
 Wemmer, Keith.....1501 W. Michigan Ave., Battle Creek
 Wencke, Carl G.....1015 Security Bank Bldg., Battle Creek
 Winslow, Sherwood B.....1509 Security Nat'l Bank Bldg., Battle Creek
 Worgess, Duane R.....165 Capital Ave. N.E., Battle Creek
 Yannitelli, S. A.....1331 W. Michigan Ave., Battle Creek
 Zheutlin, Bertram.....50 Adams St., Battle Creek
 Zindler, George A.....1206 Security Tower, Battle Creek

CASS COUNTY

Adams, Uriah M.....Marcellus
 Clary, Rudolph I.....Dowagiac
 Comstock, L. D.....216½ S. Front St., Dowagiac
 Hickman, J. K.....212½ S. Front, Dowagiac
 Loupee, George E.....Dowagiac

Loupee, S. L. (L).....Dowagiac
 Nakas, Oswaldas.....Rt. 2, Edwardsburg
 Pierce, Frank L. (L).....Dowagiac
 Pierce, K. C.....140½ S. Front, Dowagiac
 Zwergel, E. H.....Cassopolis

CHIPPEWA-MACKINAC COUNTIES

Allott, H. R.....300 Court St., Sault Ste. Marie
 Bandy, F. C. (R).....Franklin Manor, Sarasota, Fla.
 Blair, Herbert M.....300 Court St., Sault Ste. Marie
 Blue, J. J.....Cedarville
 Clausen, C. H.....300 Court St., Sault Ste. Marie
 Conrad, G. A. (L).....521 Ashmun, Sault Ste. Marie
 Finlayson, D. D.....301 E. Spruce St., Sault Ste. Marie
 Futterer, Le Roy A. (A).....Mackinac Island
 Goldberg, A. H.....301 Ashmun St., Sault Ste. Marie
 Hagele, Marie A.....300 Court St., Sault Ste. Marie
 Hague, Howard.....St. Ignace
 Hamel, Herbert E.....St. Ignace
 Harrington, H. M.....519 Ashmun, Sault Ste. Marie
 Howe, Donnell C.....300 Court St., Sault Ste. Marie

Howe, Gertrude E.....300 Court St., Sault Ste. Marie
 Mackie, T. B.....300 Court St., Sault Ste. Marie
 McBryde, L. M.....Masonic Bldg., Sault Ste. Marie
 Mertaugh, W. F.....Central Savings Bank Bldg., Sault Ste. Marie
 Montgomery, B. T.....301 E. Spruce St., Sault Ste. Marie
 Rhind, E. S.....300 Court St., Sault Ste. Marie
 Sudranski, H. F.....300 Court St., Sault Ste. Marie
 Thompson, C. F.....Drummond Island
 Trapasso, T. J.....519 Ashmun St., Sault Ste. Marie
 Venier, A. G.....519 Ashmun St., Sault Ste. Marie
 Wallen, L. J.....409 Ashmun St., Sault Ste. Marie
 Willison, Clayton (L).....509 St. James St., Sault Ste. Marie
 Yale, I. V. (L).....200 Ashmun St., Sault Ste. Marie

CLINTON COUNTY

Bennett, George W.....Elsie
Cook, Bruno C.....Westphalia
Elliott, Bruce R.....Ovid
Fillinger, Wells B.....Ovid
Foo, Charles T.....St. Johns
Grost, James M.....210 E. Walker St., St. Johns
Henthorn, A. C.....RFD 3, St. Johns
Kirker, J. G.....Fowler
Lieder, T. R.....Ovid

Luton, F. E. (L).....Beaver Island, St. James
McWilliams, W. B.....Maple Rapids
Russell, Sherwood R.....St. Johns
Sheline, V. L.....Medical Center, Ithaca
Slagh, Earl M.....Elsie
Smith, F. W.....St. Johns
Stephenson, W. F.....510 E. Walker St., St. Johns
Stoller, Paul F.....308 N. Mead St., St. Johns

DELTA-SCHOOLCRAFT COUNTIES

Anderson, F. C.....212 S. Tenth Ave., Escanaba
Benson, G. W. (A).....Ludington St., Escanaba
Bernier, A. B.....Walnut St., Manistique
Boyce, D. H.....1007 Ludington, Escanaba
Carlton, A. J. (L).....502 S. Seventh St., Escanaba
Dehlin, J. R.....1102 Wisconsin Ave., Gladstone
Fyvie, James H.....202 S. Cedar, Manistique
Groos, H. Q.....1015 S. First, Escanaba
Groos, L. P.....1015 S. First, Escanaba
Hult, O. S.....1005 Delta Ave., Gladstone
Jenke, Albert.....108 S. Tenth St., Escanaba

Jensen, Carroll.....Manistique
Kee, C. E.....1102 Wisconsin Ave., Gladstone
Lemire, D. F.....1104 S. First, Escanaba
Lemire, W. A.....1106 S. First, Escanaba
Lindquist, N. L.....205 S. 10th St., Escanaba
McInerney, T. A.....1221 Ludington, Escanaba
Miller, A. H. (L).....904 Wisconsin, Gladstone
Nagy, Charles.....Bark River
Olson, C. J.....621 Michigan Ave., Gladstone
Ryde, R. E.....Lake Shore Dr., Escanaba
Waters, Duane.....200 S. Cedar St., Manistique
Wehner, Merle E.....Manistique

DICKINSON-IRON COUNTIES

Addison, E. R.....412 Superior, Crystal Falls
Alexander, W. H.....Commercial Nat'l Bank Bldg.,
Iron Mountain
Anderson, Donald T.....400 Woodward Ave.,
Iron Mountain
Boyce, G. H. (L).....First Nat'l Bank Bldg.,
Iron Mountain
Browning J. L.....212 East B St., Iron Mountain
Carlson, R. E.....Commercial Bank Bldg., Iron Mountain
Cecconi, R. D.....110 West "B" St., Iron Mountain
Cooper, C. A.....230 Washington Ave., Stambaugh
Dittrich, R. J. (M).....310 East "C" St., Iron Mountain
Frederickson, Geron (R).....826 East "A" St.,
Iron Mountain

Gladstone, W. R.....804 Main St., Norway
Hayes, Willard N.....716 Main St., Norway
Huron, W. H.....107 East "A" St., Iron Mountain
Irvine, L. E.....326 W. Genesee, Iron River
Kohfmehl, Wm. J.....Stambaugh
McEachran, H. D.....Commercial Bank Bldg.,
Iron Mountain
Palm, E. T.....412 Superior St., Crystal Falls
Retallack, R. C.....415 Third St., Iron River
Schmutzler, W. A.....373 Woodward, Iron Mountain
Schroeder, J. M.....1115 Stockbridge, Iron Mountain
Smith, Donald R.....105 East A St., Iron Mountain
Steinke, C. G.....517 Stephenson, Iron Mountain
Werner, W.....805 Vulcan St., Iron Mountain

EATON COUNTY

Arner, Fred L.....231½ N. Main St., Bellévue
Brown, B. P.....339 S. Cochran St., Charlotte
Carothers, Daniel.....315 S. Cochran, Charlotte
Cook, J. Maxwell.....Eaton County Health Dept.,
314 S. Cochran St., Charlotte
DeLand, C. L.....121 S. Main St., Olivet
Engle, P. H. (A).....Olivet
Garlock, Fred C.....Grand Ledge
Hannah, Harry W. (A).....634 Solway St.,
Glendale 6, Calif.
Harrod, Gordon R.....Grand Ledge

Imthun, E. F.....113 E. Jefferson, Grand Ledge
Landick, R. E.....111 S. Cochran St., Charlotte
Meinke, A. H.....101 W. Plain St., Eaton Rapids
Meinke, R. K. (A).....523 11th St. S.E., Rochester, Minn.
Myers, Albert W.....Pottersville
Riley, J. L.....201½ S. Cochran St., Charlotte
Sevener, Lester G.....236 S. Cochran St., Charlotte
Sherman, E. B.....702 S. Main St., Eaton Rapids
Van Ark, Bert.....101 West Plain, Eaton Rapids
Van Ark, H. F.....101 W. Plain St., Eaton Rapids
Whitlock, Stanley C.....Dimondale
Willits, C. O.....201 W. Seminary, Charlotte

GENESEE COUNTY

Abramson, L. N. (A).....Sinai Hospital, Detroit
Adams, B. H. (A).....Henry Ford Hospital, Detroit
Adams, Chester H.....1114 Beach St., Flint
Allard, Peirre-Paul (A).....McLaren Gen. Hosp., Flint
Anderson, Alan W. (A).....Hurley Hospital, Flint
Anderson, H. H.....11280 N. Saginaw, Mt. Morris
Anderson, J. L.....220 Genesee Bank Bldg., Flint
Anderson, R. E. (A).....3002 Mason St., Flint
Andrews, Nelson A. C.....310 E. Main St., Flushing
Anthony, George E. R.....1015 Detroit St., Flint
Atekin, Hikmet (A).....Hurley Hospital, Flint

Baertsch, Lloyd M. (A).....Hurley Hosoiatal, Flint
Baird, W. C.....504 National Bldg., Flint
Bald, Frederick W.....610 Mott Fdtn. Bldg., Flint
Barbour, Fleming A.....1439 Mott Fdtn. Bldg., Flint
Bardwell, Stanley A. (A).....Hurley Hospital, Flint
Bareis, R. J. (A).....Hurley Hospital, Flint
Baske, Franklin W.....923 Maxine St., Flint
Batdorf, John.....Hurley Hospital, Flint
Batdorf, Joseph.....Goodrich Gen. Hosp., Goodrich
Bateman, L. G.....1928 Lewis, Flint
Beaudoin, Roger (A).....St. Joseph Hospital, Flint

Beck, D. R. (A).....McLaren General Hospital, Flint
 Benson, John C., Jr.....402 W. 2nd St., Flint
 Bentley, Robert H. (A).....Hurley Hospital, Flint
 Berman, Harry.....3309 Fenton Rd., Flint 7
 Bernstein, Eli N.....409 Kresge Bldg., Flint
 Best, J. A.....G 4047 Clio Rd., Flint
 Beyer, George D.....145 Vienna St., Flint
 Bibler, Richard H. (A).....Hurley Hospital, Flint
 Bishop, D. L.....2226 Detroit St., Flint 5
 Blain, Claude (A).....St. Joseph Hospital, Flint
 Bociek, R. C. (A).....Hurley Hospital, Flint
 Bogart, Leon M.....1008 Genesee Bank Bldg., Flint
 Bolduc, Gregorie (A).....Hurley Hospital, Flint
 Boles, William P.....714 Beach St., Flint
 Bolland, Peter (A).....St. Joseph Hospital, Flint
 Bota, Robert (A).....St. Joseph Hospital, Flint
 Bovenmyer, D. A. (M).....Hurley Hospital, Flint
 Bowen, Clifford C. (A).....Hurley Hospital, Flint
 Bradley, Robert M.....420 Genesee Bank Bldg., Flint
 Brain, R. Gordon.....509 First Nat'l Bank Bldg., Flint
 Branch, Hira E.....821 Mott Fdtn. Bldg., Flint
 Brasie, Donald R.....907 Citizens Bank Bldg., Flint
 Breiling, Ludwig P. (A).....Hurley Hospital, Flint
 Brickley, John (A).....St. Joseph Hospital, Flint
 Briggs, Guy D.....224 E. Court St., Flint
 Bruce, William W.....Jackson Memorial Hosp., Miami
 Bryant, D. R.....621 Mott Fdtn. Bldg., Flint
 Buchanan, William F.....104 W. Caroline St., Fenton
 Buckingham, James H. (A).....Hurley Hospital, Flint
 Burkett, L. V.....County Court House, Flint
 Burnell, Max R.....3301 Westwood Pkwy., Flint
 Cammack, K. V. (A).....1910 Northwood Apt.,
 Ann Arbor
 Campbell, William R. (A).....Hurley Hospital, Flint
 Cassidy, W. J. (A).....St. Joseph Hospital, Flint
 Caster, E. W. (L).....10505 LaSalle Blvd.,
 Huntington Woods
 Cauthen, Joseph D., Jr. (A).....Hurley Hospital, Flint
 Chambers, Myrton S.....839 Mott Fdtn. Bldg., Flint
 Chapin, M. H. (A).....Hurley Hospital, Flint
 Chase, W. D.....702 Ballenger Hwy., Flint
 Clark, Clifford P. (L).....11111 S.W. 62nd Ave.,
 Miami 43, Fla.
 Clark, R. L.....1301 Flushing Rd., Flint
 Collins, J. I.....2702 Flushing Road, Flint
 Colwell, C. W.....706 Citizens Bank Bldg., Flint
 Connell, John T.....305 Dryden Bldg., Flint
 Conover, George V.....420 Genesee Bank Bldg., Flint
 Conover, McClellan B.....312 Paterson Bldg., Flint
 Conover, T. Sidney.....420 Genesee Bank Bldg., Flint
 Cook, Henry (L).....326 Genesee Bank Bldg., Flint
 Cooper, J. C. (A).....Hurley Hospital, Flint
 Cooper, J. J. (A).....St. Joseph Hospital, Flint
 Corbett, J. J. (A).....McLaren Gen. Hospital, Flint
 Coriasso, L. B.....409 W. Genesee St., Flint
 Covert, Floyd (L).....116 Lord St., Gaines
 Coyne, K. M. (A).....2721 Clement St., Flint
 Coyouette, Paul (A).....Pontiac State Hosp., Pontiac
 Craig, W. G.....3026 Beecher Rd., Flint
 Crawford, R. I. (A).....Lyons
 Credille, Barney A.....813 Genesee Bank Bldg., Flint
 Creighton, Robert (A).....St. Joseph Hospital, Flint
 Cross, Robert (A).....Hurley Hospital, Flint
 Curry, George J.....402 Genesee Bank Bldg., Flint
 Curtin, John H.....A. C. Spark Plug Plant, Flint
 Cutler, G. C.....2415 Detroit St., Flint 5
 Dann, M. W. (M).....Hurley Hospital, Flint
 Davis, R. C.....3029 Flushing Rd., Flint
 Dawson, Ralph E.....1021 Mott Fdtn. Bldg., Flint
 DelZingro, Nicholas.....Davison
 DenBesten, Lawrence (A).....Hurley Hospital, Flint
 Denholm, Nan A.....7506 E. Lapeer Road, Davison
 Desmarais, Robert A. (A).....Hurley Hospital, Flint
 Dettman, C. K.....Nanita Dr., Montrose
 Dickstein, Bernard.....460 S. Saginaw St., Flint
 Dimond, Edwin G.....209 Genesee Bank Bldg., Flint
 Dishon, Margaret (A).....St. Joseph Hospital, Flint
 Dishon, Neil (A).....St. Joseph Hospital, Flint
 Dodds, Frederick E.....1336 Lewis St., Flint
 Dodds, Max.....608 First Nat'l Bldg., Flint
 Dooley, J. F. (A).....St. Joseph Hospital, Flint
 Dorsey, Philip W.....220 Genesee Bank Bldg., Flint
 Drewyer, Glen E.....907 Welch Blvd., Flint
 Drovin, John (A).....St. Joseph Hospital, Flint
 Dwyer, Joseph M. (A).....Hurley Hospital, Flint
 Dykewicz, R. A.....2768 Flushing Road, Flint
 Eaton, W. L.....633 Mott Fdtn. Bldg., Flint
 Eddy, Corrine S.....Pontiac State Hospital, Pontiac
 Edmonds, W. T.....1326 Begole St., Flint
 Eichhorn, Ernest M.....1112 Mott Fdtn. Bldg., Flint
 Eickhorst, Thomas N.....409 Dryden Bldg., Flint
 Elliott, Hardie B.....1634 Mott Fdtn. Bldg., Flint
 Engelman, R. M.....717 Mott Fdtn. Bldg., Flint
 Ettinger, Ralph D.....111 S. Walnut St., Fenton
 Farah, Ben S.....5001 N. Saginaw St., Flint
 Farhat, Maynard M.....620½ W. Court St., Flint
 Fee, Manson G.....311 Kresge Bldg., Flint
 Ferris, J. W.....426 N. State St., Davison
 Fielding, John (A).....St. Joseph Hospital, Flint
 Finkelstein, Theodore.....1415 Broadway, Flint
 Fitzgerald, Clemens H., Jr. (A).....Hurley Hospital, Flint
 Flanagan, Curtis J.....633 Mott Fdtn. Bldg., Flint
 Flynn, Southard T.....1121 Mott Fdtn. Bldg., Flint
 Foley, Sydney I.....2217 Mason, Flint
 Forrer, G. R.....307 E. Court St., Flint
 Fortson, Charles H. (A).....Hurley Hospital, Flint
 Frash, Devon W., Jr., (A).....Hurley Hospital, Flint
 Fuller, Harvey T.....Mt. Morris
 Gass, M. A. (A).....McLaren General Hospital, Flint
 Gelenger, S. M.....Genesee County TB Sanatorium,
 702 Ballenger Hwy., Flint
 Gibbons, J. J. (A).....McLaren General Hospital, Flint
 Goering, George R. (L).....519 Dryden Bldg., Flint
 Golden, Evelyn.....218 E. Court St., Flint
 Golden, H. Maxwell.....218 E. Court St., Flint
 Goode, R. B. (A).....McLaren General Hospital, Flint
 Goodfellow, B. T. (L).....141 Davis Lake Rd., Lapeer
 Gorne, Saul S.....619 Clifford St., Flint 3
 Goven, John (A).....St. Joseph Hospital, Flint
 Grady, Donald R.....1515 Woodslea Dr., Flint
 Griffin, C. S. (M).....McLaren General Hospital, Flint
 Griffin, Ernest P., Jr.....621 Mott Fdtn. Bldg., Flint
 Griffith, Martin N. (A).....McLaren Gen. Hosp., Flint
 Grover, H. F.....310 Dryden Bldg., Flint
 Guile, Gurdon S.....1621 Dupont St., Flint
 Gundry, G. L.....11736 Saginaw, Grand Blanc
 Gutov, Isadore H.....607 Citizens Bank Bldg., Flint
 Gutow, J. J.....726 Church, Flint
 Gutowitz, E. J. (A).....Hurley Hospital, Flint
 Guyon, J. L.....302 W. Pierson Rd., Flint
 Guyon, Mary Ann.....302 W. Pierson Rd., Flint
 Hackley, R. D.....4120 Western Rd., Flint
 Hague, Robert F.....210 E. Court St., Flint 3
 Hallitt, J. W. (A).....Hurley Hospital, Flint
 Hamady, Ruth B.....228 Welch Blvd., Flint
 Harper, R. Homer.....Buick Motor Co., Flint
 Harris, D. R. (A).....Hurley Hospital, Flint
 Hauser, Frederick V.....1012 Mott Fdtn. Bldg., Flint
 Hawkins, James E.....1226 Leith St., Flint
 Hays, J. D. (A).....McLaren Gen. Hosp., Flint
 Hennessy, Charles.....734 Mott Fdtn. Bldg., Flint
 Hicks, W. K. (A).....St. Joseph Hospital, Flint
 Hill, W. T.....4075 W. Bristol, Flint
 Hing, William.....326 Stockdale St., Flint
 Hiscock, Harold H.....1315 Mott Fdtn. Bldg., Flint
 Hockman, Thomas H.....1513 Winona, Flint
 Hoffman, J. W. (A).....Hurley Hospital, Flint
 Hooper, Kendall.....714 Beach St., Flint
 Hubbard, Wm. B.....302 Paterson Bldg., Flint
 Hubbard, W. C. (A).....302 Patterson Bldg., Flint
 Hufton, W. L.....721 W. Sixth Ave., Flint
 Hurd, Clayton E.....300 Roberts St., Fenton
 Irish, L. R. (A).....Hurley Hospital, Flint
 Lung, Omero D. (A).....Hurley Hospital, Flint

Jaarsma, R. A.....608 East Court St., Flint
 Jackish, George D. (A).....Hurley Hospital, Flint
 Jackson, Donald P.....Davison
 Jacobi, M. A. (A).....McLaren Gen. Hosp., Flint
 James, E. H. (A).....McLaren Gen. Hosp., Flint
 James, R. E.....3001 S. Saginaw St., Flint
 Johnson, Arthur H.....3219 North St., Flint
 Johnson, Bennett L., Jr., (A).....Hurley Hospital, Flint
 Johnson, F. D.....Clio
 Johnson, Frank D.....312 Paterson Bldg., Flint
 Johnson, Raymond E.....907 Welch Blvd., Flint 4
 Jones, Lafon (L).....1301 Flushing Rd., Flint 4
 Jones, L. Morris (A).....Hurley Hospital, Flint
 Jordan, P. H.....302 W. Second Ave., Flint
 Judd, A. E.....2315 Davison Rd., Flint
 Kaufman, L. D.....4002 N. Saginaw, Flint
 Kidwell, John A. (A).....Hurley Hospital, Flint
 Kimbrough, C. B.....1402 S. Saginaw St., Flint
 Kline, O. F. (A).....Hurley Hospital, Flint
 Kmak, C. J. (M).....Hurley Hospital, Flint
 Knapp, William D.....1621 Mott Fdtn. Bldg., Flint
 Koepke, B. F. (A).....McBain
 Koop, Chester S.....2503 Detroit St., Flint
 Kretchmar, Arthur H.....608 First Nat'l Bldg., Flint
 Kurtz, John J.....421 Dryden Bldg., Flint
 Laird, James I.....10114 Main St., Goodrich
 Lamb, Robert J. (A).....Hurley Hospital, Flint
 Larose, Claude (A).....McLaren Gen. Hosp., Flint
 Laws, J. E. (A).....St. Joseph Hospital, Flint
 Layman, Douglas (M).....Hurley Hospital, Flint
 Leach, J. Leonidas.....3007 Industrial Ave., Flint
 Le Mieux, L. L., Jr.....701 W. Dayton St., Flint
 Lewis, Thomas E.....3520 Richfield Rd., Flint
 Lightfoot, A. S.....101½ E. Flint Park Blvd., Flint
 Limbach, David R.....Hurley Hosp., X-Ray Dept., Flint
 Lindman, T. C.....1612 Seminole, Flint
 Livesay, Jackson E.....621 Mott Fdtn. Bldg., Flint
 Logan, G. W. (L).....120 S. Washington, Hastings
 Lois, L. (A).....McLaren Gen. Hosp., Flint
 Longfield, Gordon M. (A).....Hurley Hospital, Flint
 Lukens, T. John.....608 East Court St., Flint
 Lundeen, R. M.....3046 Canterbury Lane, Flint
 Lynch, S. H. (A).....Wyandotte General Hospital
 Wyandotte
 Lyttle, Sydney N.....615 Mott Fdtn. Bldg., Flint
 MacGregor, Delbert M.....701 Dayton W., Flint
 MacKenzie, J. W. (A).....5045 Morrish Road,
 Swartz Creek
 Macksood, Joseph A.....2501 N. Saginaw St., Flint
 Manwaring, John T.....565 Welch Blvd., Flint
 Martin, J. A. (A).....Hurley Hospital, Flint
 Mathias, Berton J.....1301 Flushing Rd., Flint
 McCabe, Margaret M.....420 Genesee Bank Bldg., Flint
 McClellan, J. W.....Buick Motor Division, 1005 Leith St.,
 Flint 2
 McFadden, Wilbur D. (A).....Hurley Hospital, Flint
 McGarry, Burton G. (L).....202 E. Caroline St., Fenton
 McGarry, Roy A.....418 Dryden Bldg., Flint
 McGeough, V. L. (A).....St. Joseph Hospital, Flint
 McGregor, Allan R. (A).....Hurley Hospital, Flint
 McKenna, Oscar W. (L).....325 Stevens St., Flint
 McLennan, James A. (A).....Hurley Hospital, Flint
 McLeod, K. W. A.....2801 N. Saginaw, Flint 5
 McLoney, E. R. (A).....St. Joseph Hospital, Flint
 McMurray, R. J.....709 Genesee Bank Bldg., Flint
 McTaggart, David.....1604 Mott Fdtn. Bldg., Flint 3
 Meininger, Dan E. (A).....McLaren Gen. Hosp., Flint
 Mendrek, Henry.....McLaren General Hosp., Flint
 Michael, S. R.....907 Welch Blvd., Flint
 Michels, Robert M.....409 N. Saginaw St., Flushing
 Michelson, R. B.....5001 N. Saginaw St., Flint
 Miller, E. E. (L).....2902 Detroit St., Flint
 Miller, Loren Eugene.....2645 Corunna Rd., Flint 3
 Miltich, Anthony J.....415 Dryden Bldg., Flint
 Moellar, J. C. (A).....McLaren Gen. Hosp., Flint
 Moore, Glenn.....323 W. Second St., Flint

Moore, Wesley P.....802 Tilden, Flint
 Morin, Joseph P. (A).....Hurley Hospital, Flint
 Morrish, Ray S.....1715 Crescent Dr., Flint
 Morrison, William H.....205 Perry Rd., Grand Blanc
 Morrissey, V. H.....101 Stockdale St., Flint
 Mosier, Edward C.....Otisville
 Murphy, E. Grant.....1825 Chelsea Circle, Flint
 Neiswander, Paul L.....Fisher Body Truck Plant,
 Grand Blanc
 Nicholls, W. W.....1301 Flushing Rd., Flint
 Nishioka, George (A).....Hurley Hospital, Flint
 Odle, Ira D.....201 Welch Blvd., Flint
 Olshansky, Donald H. (A).....Hurley Hospital, Flint
 O'Meara, B. B. (A).....St. Joseph Hospital, Flint
 Orr, J. Walter (L).....Orrs Point, Lake Fenton, Fenton
 Osher, Seymour L.....218 E. Court St., Flint
 Owsley, J. W. (A).....McLaren Gen. Hosp., Flint
 Palmer, D. D. (M).....Hurley Hospital, Flint
 Parliament, B. A.....1312 Mott Foundation Bldg., Flint
 Pateras, Vincent (A).....St. Joseph Hospital, Flint
 Paulavicius, Kestutis K. (A).....Hurley Hospital, Flint
 Petrouskas, Raymond R. (A).....Hurley Hospital, Flint
 Pfeifer, Archibald C.....11610 N. Saginaw St., Mt. Morris
 Phelps, Lynn.....Goodrich General Hosp., Goodrich
 Phillips, Robert L.....Bay View Pkwy., Nokomis, Fla.
 Phillips, R. W.....2613 Thomas St., Flint
 Pickering, W. H.....1602 Ballenger Hwy., Flint
 Pike, W. W.....7514 Miller Road, Swartz Creek
 Plymer, R. E. (A).....Hurley Hospital, Flint
 Polich, J. J.....809 Stockdale, Flint
 Portney, Jack.....428 Stevens, Flint
 Powley, Gerald W. (A).....McLaren Gen. Hosp., Flint
 Pratz, Oliver C.....1303 Detroit St., Flint
 Preston, Otto J.....300 N. Chevrolet Ave., Flint
 Prior, R. W.....707 Park St., Fenton
 Purcell, F. L.....Ternstedt Plant, Coldwater Rd., Flint
 Quin, John Jr.....5003 N. Saginaw St., Flint
 Ragan, Russel L. M.....2768 Flushing Road, Flint 3
 Rahm, J. P. (A).....Hurley Hospital, Flint
 Raine, Michael B. (A).....Hurley Hospital, Flint
 Rapport, Richard L.....715 Mott Fdtn. Bldg., Flint
 Rathburn, Robert J. (A).....McLaren Gen. Hosp., Flint
 Rawling, J. C. (M).....1121 Mott Fdtn. Bldg., Flint
 Rawlings, J. Mott.....1601 Neome Dr., Flint
 Reed, James E. (A).....Hurley Hospital, Flint
 Reibel, Donald B. (A).....Hurley Hospital, Flint
 Reichard, Orill (L).....1507 Detroit St., Flint
 Reid, J. H.....627 Campbell St., Flint
 Richardson, Josephine W.....3942 Western Rd., Flint 6
 Rieth, George F.....1402 Davison Rd., Flint
 Roberts, Floyd A. (L).....428 Thompson St., Flint
 Rowe, John B.....202 Paterson Bldg., Flint
 Royal, W. T. (M).....Hurley Hospital, Flint
 Rukey, Max.....1128½ Chevrolet Ave., Flint
 Rundles, Walter Z.....304 First Nat'l Bldg., Flint
 Rundles, Walter Z., Jr.....304 Nat'l Bldg., Flint
 Sadik, E. A. (A).....Hurley Hospital, Flint
 Sandberg, Russell G.....1315 Mott Fdtn. Bldg., Flint
 Sandy, Kenneth R.....2701 Detroit St., Flint
 Sanocki, F. E. (A).....St. Joseph Hospital, Flint
 Scavarda, Charles J.....304 First Nat'l Bldg., Flint
 Schiff, B. A.....323 W. Second St., Flint
 Schloss, R. P. (M).....Hurley Hospital, Flint
 Schmidlin, R. W.....3710 Davison Rd., Flint
 Schreiber, E. Oskar.....421 Kresge Bldg., Flint
 Schroeder, P. E. (A).....Hurley Hospital, Flint
 Schultz, J. Stanley.....3327 Fleming Rd., Flint
 Schwartz, J. M.....4300 S. Saginaw St.,
 Fisher Body Plant No. 1, Flint
 Scott, Robert D.....1215 Detroit St., Flint
 Searles, Karl F.....2932 Corruna Rd., Flint
 Seven, P. G.....1121 Mott Bldg., Flint
 Seymour, G. D.....Professional Bldg., Clio
 Shantz, Leighton O.....1239 Mott Fdtn. Bldg., Flint
 Sheeran, Daniel H.....809 Genesee Bank Bldg., Flint
 Sherwood, F. A.....610 Mott Fdtn. Bldg., Flint

Pike, D. G.....876 E. Front, Traverse City
Power, F. H.....116 Cass, Traverse City
Ramzy, C. O., Jr.....Box C, Traverse City State Hospital,
Traverse City
Salon, Dayton D.....108½ E. Front St., Traverse City
Scott, J. E.....711 Second St., Traverse City
Sheffer, M. B.....Traverse City State Hospital,
Traverse City
Sladek, E. F.....123 E. Front, Traverse City
Somerness, Duane.....Traverse City State Hospital,
Traverse City
Stokes, G. E.....State Bank Bldg., Traverse City
Stone, Fordyce H. (L).....Beulah
Swartz, F. G.....301 State Bank Bldg., Traverse City

Sweeney, Bernard.....227½ Grandview Pkwy.,
Traverse City
Thacker, Fred R.....Frankfort
Thirlby, E. L. (L).....116 Cass St., Traverse City
Thirlby, Richard L.....228 S. Madison, Traverse City
Trautman, Frederick D.....Frankfort
Wagener, Creighton.....438 W. Front St., Traverse City
Wieh, J. E.....118½ E. Front, Traverse City
Weitz, H. L.....529 Monroe, Traverse City
Wilcox, P. H.....526 W. 10th St., Traverse City
Wiley, P. K. (A).....Rt. 1, Kalamazoo
Zielke, I. H.....212 E. Front, Traverse City
Zimmerman, J. G.....306 State Bank Bldg.,
Traverse City

GRATIOT-ISABELLA-CLARE COUNTIES

Aldrich, Alfred L.....Ithaca
Barstow, D. K.....215 W. Saginaw St., St. Louis
Becker, M. G.....Edmore
Bedo, A. V.....314 S. Brown St., Mt. Pleasant
Bergin, J. H.....112½ Superior St., Alma
Bick, M. Vernon.....608 E. Chippewa, Mt. Pleasant
Brenner, E. J.....610 S. College St., Mt. Pleasant
Budge, M. J.....1035 Jefferson, Ithaca
Burch, L. J. (L).....521 E. Lincoln St., Mt. Pleasant
Burt, C. E.....110 S. Pine River, Ithaca
Burt, Loren G.....Alma
Chamberlain, R. W.....608 E. Chippewa, Mt. Pleasant
Chamichian, Souren L.....1026 S. Drive, Mt. Pleasant
Davis, L. L.....314 S. Brown St., Mt. Pleasant
Drake, Wilkie M. (L).....Breckenridge
DuBois, C. F.....706 State St., Alma
Dunlop, Donald.....310 E. Fourth St., Clare
Graham, B. J.....119½ S. Superior St., Alma
Hall, R. F.....805 Douglas St., Mt. Pleasant
Hammerberg, Kuno.....622 McEwan, Clare
Harrigan, W. L.....408 E. Broadway, Mt. Pleasant
Hedges, Frank W.....General Delivery, Edmore

Hersee, W. E.....306 S. College, Mt. Pleasant
Hobbs, A. D.....120 W. Center St., St. Louis
Hoogerland, C. L.....303 W. Superior, Alma
Hyslop, L. F.....205 S. College, Mt. Pleasant
Johnson, P. R.....206 S. College Ave., Mt. Pleasant
Juhnke, L. W.....314 S. Brown St., Mt. Pleasant
Kilborn, H. F.....Ithaca
McArthur, S. C.....Rosebush
Oldham, E. S.....Breckenridge
Putzig, Louis W.....Blanchard
Ringer, P. H.....314 S. Brown St., Mt. Pleasant
Rottschafner, J. L.....715 Center St., Alma
Silvert, Pasche P.....Vestaburg
Strange, R. H.....117 S. College, Mt. Pleasant
Von Lackum, L. F.....535 Prospect Blvd., Waterloo, Iowa
Waggoner, R. L.....120 W. Center St., St. Louis
Wallman, C. H.....901 State St., Alma
Wickert, L. R.....314 S. Brown St., Mt. Pleasant
Wilcox, R. A.....525 State St., Alma
Wilson, Earl C.....Harrison
Wolfe, K. P.....427 W. Superior, Alma
Wood, C. B.....RFD No. 2, Mt. Pleasant
Wood, J. M.....314 S. Brown St., Mt. Pleasant

HILLSDALE COUNTY

Bates, M. P.....110 S. Manning, Hillsdale
Davis, L. A.....Camden
Davis, W. B. (M).....Murphy Army Hospital, Waltham
Day, Luther W.....112 E. Chicago St., Jonesville
Hanke, George R. (L).....RFD, Osseo
Hodge, C. L.....Reading
Hughes, Henry F. (L).....Hillsdale
MacNeal, John A.....76 Manning St., Hillsdale
Martindale, E. A. (L).....Chelsea Methodist Home,
Chelsea
Mattson, H. F.....32 S. Broad St., Hillsdale

McFarland, O. G. (L).....North Adams
Michel, W. O. (A).....University Hospital, Ann Arbor
Miller, Harry C. (L).....4760 Panorama Dr., San Diego 3
Peterson, C. A.....32 Broad St., Hillsdale
Richey, B. R.....849 Wildwood Rd., Montgomery
Sawyer, W. W.....61 N. Howell St., Hillsdale
Stein, Arthur J.....144 Budlong St., Hillsdale
Strom, Arthur W.....32 S. Broad St., Hillsdale
Trapp, Donald G.....32 S. Broad St., Hillsdale
Wiggins, Ira W.....230 E. Chicago St., Jonesville

HOUGHTON COUNTY

Aldrich, A. B.....503 Sheldon Ave., Houghton
Aldrich, L. C.....301 Quincy St., Hancock
Bourland, P. D. (L).....134½ Calumet Ave., Calumet
Bourland, P. E. M., Lt. Col., M. C. (M).....Hdqts.
U. S. Army Alaska APO 949 Seattle, Wash.
Brewington, G. F. (L).....1805 Walnut Ave.,
Las Vegas, Nev.
Burke, John J.....10 Duncan Ave., Hubbell
Hillmer, Raymond E.....1 Algolah, Painesdale
Hosking, F. S.....328 Florida St., Laurium
Janis, Anton J.....East Hancock, Hancock
King, Sidney.....St. Joseph Hospital, Hancock
Kirtan, Job R. W. (L).....106 Sixth St., Calumet
Kolb, F. E.....128 Calumet, Calumet
LaBine, Alfred.....1019 College Ave., Houghton

Larson, Forrest W.....1400 E. Houghton, Houghton
Lepisto, V. E.....414 Hecla St., Laurium
Levin, Simon (L).....1209 College Ave., Houghton
Lund, C. A. E.....1205 Calumet St., Lake Linden
Murphy, P. J.....130 Calumet, Calumet
Nolan, L. E.....1033 Mine St., Calumet
Potter, E. C.....Baraga County Hospital, L'Anse
Repola, Kenneth L.....338 Iroquois St., Laurium
Roche, Andrew M.....240 Pewabic St., Laurium
Sloan, P. S.....214 Clark St., Houghton
Smith, Charles R.....Hancock
Stroube, J. A.....Baraga County Memorial Hosp., L'Anse
Wickliffe, J. T. P.....1167 Calumet Ave., Calumet
Williams, Marshall S.....St. Joseph's Hospital, Hancock
Winkler, Henry J.....L'Anse

HURON COUNTY

Bash, T. L.....Kinde
Dixon, Ralph C.....Pigeon
Elliott, C. S.....Pigeon
Gettel, Roy R.....Bad Axe
Herrington, Charles I.....Bad Axe
Herrington, Willet J.....Bad Axe
Oakes, C. W.....Harbor Beach

Ritsema, John.....Sebewaing
Scheurer, Clare A.....Pigeon
Sorensen, M. G.....P.O. Box, Elkton
Steinhardt, Edward E.....Bad Axe
Thompson, J. E.....Caseville
Turner, Phillip R.....Harbor Beach
Wible, Charles F.....Sebewaing

INGHAM COUNTY

Agate, George.....Mich. Dept. of Health, Lansing
Aiken, Donald J. (A).....St. Lawrence Hosp., Lansing
Alexander, Reuben G.....301 Seymour, Lansing
Altland, J. K.....Mich. Dept. of Health, Lansing
Amante, A. R. (A).....E. W. Sparrow Hosp., Lansing
Asselin, David C.....503 Amer. State Bank Bldg., Lansing
Badgley, W. O.....624 N. Capitol Ave., Lansing
Baker, T. C.....P.O. Box 756, Lansing
Bates, Richard.....1820 E. Michigan Ave., Lansing
Bauer, Theodore I.....808 Michigan Nat'l. Tower, Lansing
Behen, Wm. C.....535 S. Capitol, Lansing
Behney, C. A.....Mich. Dept. of Health, Lansing
Bellinger, E. G. (L).....114 W. Lenawee, Lansing
Berden, Eleanor Alice (A).....Edw. W. Sparrow Hosp.,
Lansing
Berens, B. M.....110 N. Rosemary, Lansing
Berge, R. E.....201 N. Sycamore St., Lansing
Bergron, Milton C. (A).....St. Lawrence Hosp., Lansing
Bevez, Frank (M).....3209 S. Cambridge Rd., Lansing
Bingham, B. W.....125 W. Saginaw St., Lansing
Black, Charles E.....529 W. Grand River, Williamston
Black, Gertrude C.....529 W. Grand River Ave.,
Williamston
Bradford, C. W.....301 Seymour St., Lansing
Branco, M. C. (A).....E. W. Sparrow Hosp., Lansing
Breakey, Robert S.....1211 Bank of Lansing Bldg., Lansing
Brisson, D. A. (A).....St. Lawrence Hosp., Lansing
Brown, Fred W., Jr.....536 Tussing Bldg., Lansing
Brubaker, Earl W.....1406 Bank of Lansing Bldg., Lansing
Burhans, J. B.....119 E. Grand River Ave., East Lansing
Burhans, R. A.....808 Michigan Nat'l Tower, Lansing 8
Cairns, D. A.....136 W. Ash St., Mason
Calomeni, Anthony D.....309 Seymour, Lansing
Carlson, R. G.....3526 W. Saginaw St., Lansing
Carr, Earl I.....300 W. Ottawa, Lansing
Casey, B. L.....M.S.U. Health Center, East Lansing
Chaskes, Marion Iddings.....226 S. Capitol Ave., Lansing
Castaneda, C. M. (A).....E. W. Sparrow Hosp., Lansing
Cheney, W. D.....Dept. of Radiology, E. W. Sparrow
Hosp., Lansing 12
Christian, L. G.....108 E. St. Joseph, Lansing
Clark, W. E.....136 W. Ash St., Mason
Clinton, George R.....136 W. Ash St., Mason
Combs, R. G.....300 W. Ottawa, Lansing
Comstock, H. C.....1031 E. Michigan Ave., Lansing
Cook, R. J.....105 S. Jenison Ave., Lansing
Coopwood, W. E. (A).....Edw. W. Sparrow Hosp., Lansing
Cope, H. E.....Mich. Dept. of Health, Lansing
Cordes, J. F.....512 Michigan Nat'l Tower, Lansing
Corneliuson, Goldie B.....Mich. Dept. of Health, Lansing
Cowan, J. A.....825 Touraine, East Lansing
Crisostomo, Flor de Liza (A).....Edw. W. Sparrow Hosp.,
Lansing
Crisostomo, Santiago (A).....E. W. Sparrow Hosp., Lansing
Cummings, G. D.....Mich. Dept. of Health, Lansing
Darling, L. H.....115 W. Hillsdale, Lansing
Dart, Dorothy.....Box A, Ypsilanti State Hosp., Ypsilanti
Dawe, C. D.....521 N. Capitol Ave., Lansing
Dean, Carleton.....252 Hollister Bldg., Lansing
De Kleine, Wm. (R).....90 Concord, Buffalo, N. Y.
Denton, J. E. (A).....E. W. Sparrow Hosp., Lansing

DeVries, C. L. F.....320 Townsend, Lansing
Dexter, Mary J.....129 E. Maple, Mason
Doyle, C. P. (L).....1408 Bank of Lansing Bldg., Lansing
Drolett, Donald J.....108 Division St., East Lansing
Drolett, Fred J.....900 Prudden Bldg., Lansing
Drolett, L. A.....3526 W. Saginaw, Lansing
Dunn, F. M.....301 Seymour, Lansing
Eggers, E. M. (A).....Edw. W. Sparrow Hosp., Lansing
Ellis, Bertha W. (R).....Port Blakely, Wash.
Ellis, C. W. (L).....Port Blakely, Wash.
Feeney, Kenneth J.....1908 Mich. Nat'l Tower, Lansing 8
Fejerman, Natalio (A).....E. W. Sparrow Hosp., Lansing
Ferro, Dora N. (A).....E. W. Sparrow Hosp., Lansing
Feurig, J. S.....MSU Health Center, East Lansing
Finch, Russell L.....420 S. Walnut St., Lansing
Folkers, Leonard M.....234 Michigan Ave., East Lansing
Fong, T. H. (A).....E. W. Sparrow Hosp., Lansing
Fortino, S. P.....203 Bauch Bldg., Lansing
Fosgett, Wilbur W.....210 E. Hillsdale St., Lansing
French, Horace L.....301 Seymour, Lansing
Fryer, Douglas H.....Mich. Dept. of Health, Lansing
Gardner, C. B.....320 Townsend St., Lansing
Garlinghouse, A. John.....408 N. Capitol Ave., Lansing
George, H. C.....335 Seymour St., Lansing
Goldner, Roy E.....1318½ S. Washington, Lansing
Govons, S. R.....308 N. Capitol Ave., Lansing
Hardy, A. T. (A).....E. W. Sparrow Hosp., Lansing
Harris, H. W.....609 N. Washington Ave., Lansing
Harrison, W. H.....834 W. St. Joseph, Lansing
Harrold, J. F.....326 W. Ionia St., Lansing 15
Hart, L. C.....119 W. Lenawee, Lansing
Hautau, Emily R.....308 Highland Ave., East Lansing
Hatton, R. L. (A).....St. Lawrence Hosp., Lansing
Hayes, R. E.....1101½ S. Washington Ave., Lansing
Hayford, William D.....609 N. Washington Ave., Lansing
Heald, Gordon H.....1108 Bank of Lansing Bldg., Lansing
Heckert, Frank B.....1105 Bank of Lansing Bldg., Lansing
Heckert, J. K.....1105 Bank of Lansing Bldg., Lansing
Heerdt, Mark E.....Grand River & Grandview, Okemos
Henderson, N. D.....826 Sunset Lane, East Lansing
Henry, L. L.....326 Townsend, Lansing
Henry, R. A.....1515 W. Mt. Hope Ave., Lansing
Hermes, E. J.....604 Willow St., Lansing
Heustis, Albert E.....Mich. Dept. of Health,
Dewitt Rd., Lansing
Himmelberger, R. J.....320 Townsend, Lansing
Hoffer, Wm. E.....327 Shepard St., Lansing
Hofstra, Raymond (M).....1629 Berkeley Dr., Lansing
Hogg, R. E.....Holt
Holland, C. F.....125 W. Saginaw St., Lansing
Huggett, Clare C.....126 W. Grand River, Lansing
Hurth, M. S.....1717 Jerome St., Lansing
Isbister, J. L.....Mich. Dept. of Health, Lansing
Jackson, L. E. (A).....St. Lawrence Hosp., Lansing
Jacob, S. Sprigg.....201 Ann St., East Lansing
Johnson, D. B.....320 Townsend St., Lansing
Johnson, Henry T.....1439 E. Michigan Ave., Lansing
Johnson, Kenneth H.....1116 Olds Tower, Lansing
Johnson, R. P. (A).....Box 1122, V. A. Hosp., Hines, Ill.
Jones, Francis, Jr.....716 Mich. Nat'l Tower, Lansing
June, R. C.....426 S. Walnut St., Lansing

Kahn, David.....401 American State Bank Bldg., Lansing
 Kalmbach, R. E.....301 Seymour St., Lansing
 Katlein, S. B. (A).....1326 Burcham Dr., East Lansing
 Keim, C. D.....1415 W. Kalamazoo St., Lansing
 Kelly, William.....Cass Bldg., Lansing
 Kent, A. Edith H.....311 S. Pine, Lansing
 Kent, Herbert K.....311 S. Pine, Lansing
 Kenyon, Fanny H.....Mich. Dept. of Health, Lansing
 Klunzinger, Willard R.....326 W. Ionia St., Lansing
 Kraft, L. C.....209 S. Main, Leslie
 Landy, G. R.....517 S. Grand, Lansing
 Lange, Philip F.....1923 S. Cedar St., Lansing
 Lanting, Helen E.....231 N. Jenison, Lansing
 Lauzun, Virginia.....309 W. Main, Lansing
 LeDuc, Don M.....317 W. Joseph St., Lansing
 Leeder, Fred S.....Mich. Dept. of Health, Lansing
 Leshock, J. C.....1437 E. Michigan Ave., Lansing
 Letourneau, R. A. (A).....St. Lawrence Hosp., Lansing
 LeVette, Harry L.....117½ W. Shiawassee, Lansing
 Lewis, Clayton, Jr.....903 E. Grand River, East Lansing
 Lindsay, C. V., Jr. (A).....E. W. Sparrow Hosp., Lansing
 Lingl, F. A. (A).....E. W. Sparrow Hosp., Lansing
 Linnell, Paul C. (A).....St. Lawrence Hosp., Lansing
 Long, C. O.....1831 Roseland Ave., East Lansing
 Lopez, C. M. (A).....E. W. Sparrow Hosp., Lansing
 Loree, Maurice C.....120 W. Hillsdale, Lansing
 Lucas, T. A.....426 W. Ottawa, Lansing
 Ludlum, L. C.....1126 W. Saginaw St., Lansing
 Malcolm, H. E.....335 Seymour St., Lansing
 Mannausa, L. R. (A).....St. Lawrence Hosp., Lansing
 Marante, Isara L. (A).....E. W. Sparrow Hosp., Lansing
 Marante, Rosendo (A).....E. W. Sparrow Hosp., Lansing
 Martin, W. O.....4765 Nakoma, Okemos
 Marzolf, M. F.....300 W. Ottawa St., Lansing
 McConnell, E. G. (R).....212 Leslie St., Lansing
 McCorvie, C. Ray.....903 E. Grand River Ave., East Lansing
 McCorvie, D. R.....129 E. Grand River Ave., Williamston
 McCoy, Earl M. (R).....Grand Ledge
 McElmurry, Leland R.....209 N. Walnut, Lansing
 McGillicuddy, Oliver B.....1816 Mich. Nat'l Tower, Lansing
 McGillicuddy, R. J.....300 W. Ottawa, Lansing
 McIntyre, J. E. (L).....600 S. Grand Ave., Lansing
 McLaughlin, J. H.....1023 E. Michigan Ave., Lansing
 McNamara, B. E.....326 Townsend, Lansing
 Meade, Robert J.....1023-25 E. Michigan Ave., Lansing
 Meade, William H.....1023 E. Michigan, Lansing
 Meilleur, P. A. (A).....St. Lawrence Hosp., Lansing
 Melick, R. C.....326 W. Ionia, Lansing
 Menzies, Clifford G.....MSU Hospital, East Lansing
 Mercer, W. E.....304 Evergreen, East Lansing
 Meyer, H. R. (R).....2117 Teel Ave., Lansing
 Miller, W. J. (A).....E. W. Sparrow Hosp., Lansing
 Molina, Elba.....1512 E. Michigan, Lansing
 Monfort, Robert N.....Health Center, MSU, East Lansing
 Montojo, P. M. (A).....E. W. Sparrow Hosp., Lansing
 Morrow, R. J.....409 W. Ottawa, Lansing
 Nadeau, J. H. (A).....734 Clayton St., Lansing
 Nakfoor, E. C.....1515 W. Mt. Hope Ave., Lansing
 Neering, James C.....X-Ray Dept., St. Lawrence Hosp., Lansing
 Newman, John R. (A).....St. Lawrence Hosp., Lansing
 Niland, Paul T.....St. Lawrence Hosp., Lansing
 Ochsner, P. J.....Fisher Body Plant, Lansing
 Paine, W. G.....609 N. Washington Ave., Lansing
 Palmer, R. E.....535 S. Capitol Ave., Lansing
 Parker, Earl E.....207 E. Bellevue, Leslie
 Peets, Ronald.....Grand River & Grandview, Okemos
 Philips, David P.....333 N. Chestnut St., Lansing
 Pinkham, R. A. (R).....535 N. Capital Ave., Lansing
 Plant, J. F. (A).....St. Lawrence Hosp., Lansing
 Plesscher, Wm.....119 E. Grand River Ave., East Lansing
 Pomeroy, Richard W.....609 N. Washington, Lansing
 Ponton, Joseph C.....117 E. Oak, Mason
 Poppen, C. J.....1057 Roxburgh Rd., East Lansing
 Prall, H. J.....214 W. Main St., Lansing

Randall, O. M.....420 S. Walnut, Lansing
 Rector, F. L. (R).....2835 N.E. Brazee Court, Portland 12, Oregon
 Reed, O. G.....M.S.U. Health Center, East Lansing
 Rejtman, Doro Gun (A).....E. W. Sparrow Hospital, Lansing
 Reynolds, E. E.....153 E. Grand River Ave., Williamston
 Richards, F. D.....Dewitt
 Richardson, M. L.....E. W. Sparrow Hosp., Lansing
 Robson, Edmund J.....215 N. Walnut, Lansing
 Roland, C. B. (A).....526 Rulison, Lansing
 Rollstin, R. A.....Oldsmobile Div., G.M.C., Lansing
 Rozan, J. S.....511 Bank of Lansing Bldg., Lansing
 Ruhmkorff, R. H.....Mich. State College Health Center, East Lansing
 Russell, C. V. (R).....Rt. 1, Northport
 Rutledge, S. H.....110 W. Hillside St., Lansing
 Sander, J. F.....Cherry Hill Farm, Okemos
 Scallin, J. F.....125 W. Saginaw St., Lansing
 Scheidt, R. Rudolph.....126 W. Grand River Ave., Lansing
 Schultz, Arthur E.....119 E. Grand River Ave., East Lansing
 Seger, F. L. (L).....1035 Cherry St. N.E., St. Petersburg, Florida
 Shapiro, Hyman D.....201 W. Hillsdale St., Lansing
 Sharp, Mahlon S.....521 N. Capitol, Lansing
 Shaw, Milton.....320 Townsend, Lansing
 Sherman, G. A.....112 W. Hillsdale, Lansing
 Sichler, Harper G.....301 Seymour, Lansing
 Siegel, David.....1211 Bank of Lansing Bldg., Lansing
 Silverman, Irving E.....1009 E. Michigan Ave., Lansing
 Sleight, Justin L.....117½ W. Shiawassee, Lansing
 Smith, Anthony V.....116 W. Sycamore St., Mason
 Smookler, B. H. (A).....1139 Gould Road, Lansing
 Snyder, LeMoyné.....235 Valley View Dr., Paradise, Cal.
 Snyder, Ruth C. E.....234 W. Michigan, East Lansing
 Spagnuolo, A. J.....1418 S. Logan St., Lansing
 Spalding, R. W.....Box 900, Lansing
 Spencer, Perry C.....320 Townsend, Lansing
 Stanka, A. G. (L).....Alexander Bldg., Grand Ledge
 Stanley, Arthur L.....401 W. Greenlawn, Lansing
 Stehman, V. A.....Lewis Cass Bldg., Lansing
 Steiner, A. A. (A).....Rt. 3, Grand Ledge
 Steiner, S. D.....Oldsmobile Div., G.M.C., Lansing
 Stephan, W. E.....301 Seymour St., Lansing
 Stiles, Frank.....2014 Mich. Nat'l Tower, Lansing
 Stilwill, G. D.....185 Grandview, Hamden, Conn.
 Stimson, Paul R.....517 S. Grand Ave., Lansing
 Stone, B. J.....1031 E. Michigan Ave., Lansing
 Stow, Robert M.....512 Mich. Nat'l Tower, Lansing
 Strauss, P. C.....408 Am. State Bank Bldg., Lansing
 Stringer, C. J.....401 W. Greenlawn, Lansing
 Sundell, Edwin C.....122 W. Hillsdale St., Lansing
 Swartz, F. C.....215 N. Walnut St., Lansing
 Tamblyn, F. W.....335 Seymour, Lansing
 Tauber, H. F. (A).....E. W. Sparrow Hosp., Lansing
 Thaden, D. W.....401 W. Grand River, East Lansing
 Toothaker, K. W.....930 N. Washington Ave., Lansing
 Trescott, Robert F.....716 Michigan Nat'l Tower, Lansing
 Trimby, Robert H.....122 W. Hillsdale, Lansing
 Troost, F. L.....4341 W. Delhi Rd., Holt
 VanderZalm, T. P.....1452 Cambridge Rd., Lansing
 Venier, Joseph H.....812 Sparrow Ave., Lansing
 Vergara, Victorino (A).....St. Lawrence Hosp., Lansing
 Wadley, Ralph.....335 Seymour, Lansing
 Wainright, J. W.....215 N. Walnut St., Lansing
 Walker, Leo W.....Dept. of Pathology, St. Lawrence Hospital, Lansing
 Wellman, John M.....301 Seymour Ave., Lansing
 Wenzler, P. J. (M).....606 W. Dalton Dr., Ethan Allen AFB, Winooksi, Vermont
 Wilensky, Thomas.....201 W. Hillsdale St., Lansing
 Willson, Howard S.....704 Olds Tower, Lansing
 Wolcott, Lester E.....Grand River & Grandview, Okemos
 Worthington, Ralph.....532 Tussing Bldg., Lansing

IONIA-MONTCALM COUNTIES

Anderson, Donald H.....	Portland	House, G. W.....	810 Macomber St., Greenville
Bird, Wm. L.....	Greenville	Kazmers, Nikolas.....	Lakeview
Birzgalis, Alfreds.....	Ionia State Hospital, Ionia	Kelsey, L. E. (L).....	Lakeview
Buck, Jack.....	Ionia	Kopchick, Joseph.....	Mui
Bunce, E. P. (L).....	Trufant	Kozachik, Martin.....	Portland
Bunce, Leo W.....	Trufant	Lilly, Isaac S. (L).....	Stanton
Campbell, R. E.....	106 N. Depot St., Ionia	Lincoln, Norman.....	Lake Odessa
Cook, G. H.....	Ionia State Hospital, Ionia	Marston, L. L.....	Lakeview
Dunkin, Lloyd S.....	Greenville	Minick, Wm.....	103 E. Washington St., Belding
Fleming, J. W. C. (L).....	Pewamo	Olsen, Bruce.....	Greenville
Foust, Joseph C.....	Ionia	Pates, Donald.....	Belding
Fox, Harold M.....	Portland	Peabody, C. H. (L).....	582 Tod Lane, Youngstown, O.
Geib, O. P.....	Carson City	Reid, Harold E.....	Stanton
Glerum, John B.....	Greenville	Rice, Robert E.....	Greenville
Haarer, John.....	State Hospital, Ionia	Robertson, P. C. (L).....	Ionia State Hosp., Ionia
Halick, John.....	P.O. Box 271, Greenville	Slagh, Milton E.....	Saranac
Hansen, Carl M.....	Stanton	Smith, R. O.....	111 N. Kidd St., Ionia
Hansen, M. M.....	127 S. Lafayette Greenville	Socha, Edmund S.....	Ionia
Haskell, Robert H. (L).....	1232 13th St. N.W., Winter Haven, Florida	Stevens, C. E.....	419 S. Bower, Greenville
Hoffs, M. A.....	Lake Odessa	Swift, E. R. (L).....	Lakeview
Hollard, A. E. (L).....	Belding	Tannheimer, J. F.....	Ionia
		Tromp, J. L.....	Lake Odessa
		Van Loo, J. A.....	103 E. Washington St., Belding

JACKSON COUNTY

Abraham, A. O.	Hudson	Kempton, George B.	511 S. West Ave., Jackson
Adams, Ellis W.	517 Wildwood, Jackson	Kiessling, Arnold	511 S. West Ave., Jackson
Ahronheim, J. H.	1410 Greenwood, Jackson	Kline, S. L.	3525 Jefferson Rd., Clark Lake
Appel, Saul	510 Dwight Bldg., Jackson	Kudner, D. F.	435 Wildwood, Jackson
Baker, George M.	Parma	Lake, Edward C.	612 First St., Jackson
Beckwith, Sidney A.	Stockbridge	Landron, Daniel	Michigan Center
Bentley, J. P.	404 McNeal St., Jackson	Lenz, Charles R.	405 First St., Jackson
Bentley, Mary N.	404 McNeal St., Jackson	Leonard, Clyde A. (L)	1116 S. Bowen, Jackson
Brashares, Z. A.	Brooklyn	Lewis, E. F.	1112 Carlton Blvd., Jackson
Bullen, G. Rex	418 Third, Jackson	Linden, V. E.	605 Dwight Bldg., Jackson
Clarke, Corwin S.	605 Dwight Bldg., Jackson	Ludwick, J. E.	237 W. Washington, Jackson
Cochrane, Wayne A. (L)	409 McBride St., Jackson	Ludwick, J. P.	237 W. Washington, Jackson
Cooley, Charles W.	Mercy Hospital, Jackson	McGarvey, Wm. E.	802 City Bank Bldg., Jackson
Cooley, Randall M.	141 E. Robinson, Jackson	McLaughlin, J. M.	710 S. Brown St., Jackson
Corley, Cecil	204 Homcrest Rd., Jackson	McLaughlin, M. J.	R.F.D. No. 1, Jackson
Corley, Ennis H.	1211 W. Franklin St., Jackson	McLaughlin, Herbert B.	439 Wildwood Ave., Jackson
Corley, Robert	204 Homcrest Rd., Jackson	Meads, Jason B.	1406 City Bank Bldg., Jackson
Cox, Ferdinand (L)	1601 Fourth St., Jackson	Medlar, Robert E.	719 Seventeenth St., Jackson
Daly, Byrne M.	709 Oakridge Dr., Jackson	Morelli, Lorenzo, Maj. USAF (Med) (M)	4234th USAF Hosp., MacDill AFB, Tampa, Florida
DeMay, Cuthbert E.	403 E. Michigan, Jackson	Muhich, R. A.	1204 First St., Jackson
DeMay, John D.	403 E. Michigan, Jackson	Munro, Colin D. (L)	740 W. Michigan Ave., Jackson
Deming, Richard C.	517 Wildwood, Jackson	Munro, J. E. (L)	1015 Pigeon St., Jackson
Dengler, Charles R.	504 Third St., Jackson	Munro, Nathan D.	740 W. Michigan Ave., Jackson
Dickman, Harry M.	120 N. Michigan, Hudson	Murphy, B. M.	1134 E. Ganson St., Jackson
Douglas, E. W. (L)	4000 Cooper St., Jackson	Newton, Ray E.	910 Reynolds Bldg., Jackson
Filip, H. K.	755 W. Michigan Ave., Jackson	Oleksy, Stanley P.	744 W. Michigan Ave., Jackson
Finton, Robert E.	1204 Nat'l Bank Bldg., Jackson	Olsen, L. L.	435 Wildwood Ave., Jackson
Finton, Walter L. (L)	297 W. Michigan Ave., Jackson	Otis, Grant L.	525 Wildwood Ave., Jackson
Foust, W. L.	219 E. Michigan Ave., Grass Lake	Papadopoulos, Valentina	1111 E. Michigan Ave., Jackson
Gibson, Frank J. (L)	2717 S. Sixth St., St Petersburg, Florida	Payne, Andrew K.	Foot Hospital, Jackson
Greenbaum, Harry	1203 Greenwood, Jackson	Phillips, George H.	TB Sanatorium, Jackson
Growt, Bowers H.	Addison	Porter, Horace Wray	505 Wildwood Ave., Jackson
Habenicht, Hilda A.	910 Reynolds Bldg., Jackson	Pray, Frank F. (L)	310 Steward Ave., Jackson
Hackett, Thomas L.	519 N. East Ave., Jackson	Pray, G. R. (L)	404 S. Jackson, Jackson
Hanf, Cyril F.	Springport	Preston, J. A.	Mercy Hospital, Jackson
Hanson, V. R.	Chelsea	Rice, J. W.	421 McNeal St., Jackson
Hardie, George C.	290 W. Michigan, Jackson	Ries, Richard G.	612 First St., Jackson
Hicks, Glenn C. (L)	1009 Wildwood Ave., Jackson	Riley, P. A.	500 S. Jackson St., Jackson
Holst, John B.	606 City Bank Bldg., Jackson	Riley, P. A., Jr.	500 S. Jackson St., Jackson
Holstein, Arthur P. (A)	214 Ann Arbor St., Manchester	Sargent, Leland E. (A)	114 N. Thompson St., Jackson
Hunt, Maurice E.	2534 Francis St., Jackson	Sautter, W. A.	Horton
Huntley, W. B.	Hudson	Schmidt, T. E.	1202 Reynolds Bldg., Jackson
Joerin, W. A.	612 First St., Jackson	Scott, John A.	432 W. Michigan Ave., Jackson
Karr, Jean P.	502 W. Michigan Ave., Jackson	Shaeffer, Arthur M.	1615 Carlton Blvd., Jackson
Keefe, A. H.	Concord	Shaeffer, L. Dale	1615 Carlton Blvd., Jackson

Sher, David B.....4000 Cooper St., Jackson
 Sill, Henry W.....290 W. Michigan, Jackson
 Sirhal, Alfred M.....Brooklyn
 Smith, Dean W.....500 W. Michigan, Jackson
 Southwick, W. A. (A).....948 Cooper St., Jackson
 Stackable, W. R.....439 Wildwood Ave., Jackson
 Stewart, L. L. (L).....308 Edgewood, Jackson
 Stewart, L. L., Jr.....901 Reynolds Bldg., Jackson
 Stolberg, Carl A.....517 Wildwood Ave., Jackson
 Stone, Ethon L.....719 Seventeenth St., Jackson
 Sugar, Samuel.....509 Reynolds Bldg., Jackson
 Tate, Cecil E.....1315 Francis St., Jackson
 Taylor, Ross V.....517 Wildwood, Jackson
 Thalner, L. F.....609 W. Michigan Ave., Jackson
 Thayer, E. A.....1104 National Bank Bldg., Jackson

Thompson, T. B. (M).....434 Wildwood Ave., Jackson
 Torwick, E. T.....501 Dwight Bldg., Jackson
 Townsend, J. W.....108 Hague, Vandercook Lake,
 Jackson
 Van Gasse, J. J.....City Offices, Jackson
 Van Schoick, Frank.....419 W. High St., Jackson
 Van Schoick, John D.....Hanover
 Van Wagnen, Frederick I., Jr.....434 Wildwood Ave.,
 Jackson
 Virivski, Edward E.....603 South Elm St., Jackson
 Weddon, Edward R.....Stockbridge
 Wholihan, John W.....102 Lydia St., Jackson
 Wickham, Woodward A.....420 W. Michigan, Jackson
 Wille, W. S.....1204 First St., Jackson
 Winter, G. E. (L).....2333 22nd St. S., St. Petersburg, Fla.
 Young, A. G. (L).....118 Moore St., Jackson

KALAMAZOO COUNTY

Aach, Hugo A.....3314 Bronson, Kalamazoo
 Alexander, C. A.....118 W. North, Kalamazoo
 Andrews, Sherman E.....224 E. Cedar St., Kalamazoo
 Angell, H. H. (A).....301 Henrietta St., Kalamazoo
 Appel, B. A.....310 Bronson Medical Center, Kalamazoo
 Appel, William P.....310 Bronson Med. Ct., Kalamazoo
 Armstrong, Robert J.....605 Hanselman Bldg., Kalamazoo
 Banner, Lawrence R.....507 S. Burdick St., Kalamazoo
 Barak, Herbert G.....224 McNair Bldg., Kalamazoo
 Barnabee, James W. (L).....503 S. Burdick, Kalamazoo
 Barrows, Winona M.....Southwestern Mich. TB San.,
 1500 Blakslee St., Kalamazoo
 Barry, M. Leroy.....Plainwell Sanitarium, Plainwell
 Benjamin, Margaret.....70 Willett, Albany, N. Y.
 Bennett, Keith F.....252 E. Lovell, Kalamazoo
 Betz, E. G.....216 Bronson Medical Center, Kalamazoo
 Birch, W. G.....212 Bronson Medical Center, Kalamazoo
 Bodmer, Harvey C.....403 W. Kalamazoo St., Kalamazoo
 Bond, G. C. (A).....301 Montrose, Kalamazoo
 Borgman, Wallace.....420 John St., Kalamazoo
 Breneman, James C.....Galesburg
 Brown, Irmel W.....306 Kalamazoo Nat. Bank Bldg.,
 Kalamazoo
 Brue, Peter P.....1009 Cambridge Dr., Kalamazoo
 Burbidge, E. L.....259 Park Ave., Parchment
 Burrell, R. B.....136 E. Michigan Ave., Kalamazoo
 Caldwell, C. T. (A).....2112 Sheffield Dr., Kalamazoo
 Callander, C. G.....4418 Lake Forest Dr., Kalamazoo
 Cartland, G. F. (A).....1704 Cambridge Rd., Kalamazoo
 Cashen, Russell M.....217 Bronson Med. Ct., Kalamazoo
 Chrest, Clarence P.....458 W. South St., Kalamazoo
 Cobb, Horace R.....305 Pythian Bldg., Kalamazoo
 Conger, T. W., Ph.D. (A).....Upjohn Co., Kalamazoo
 Conrad, Maynard M.....252 E. Lovell St., Kalamazoo
 Cook, Ralph G. (L).....615 Clinton St., Kalamazoo
 Cooper, Paul F.....252 E. Lovell St., Kalamazoo
 Cotton, Avery (A).....Upjohn Company, Kalamazoo
 Crawford, Kenneth L.....612 Douglas Ave., Kalamazoo
 Creager, Ray O.....909 Wheaton, Kalamazoo
 Cretsinger, Francis C.....224 E. Cedar St., Kalamazoo
 Currier, R. K.....6646 Portage St., Kalamazoo 25
 Dahlstrom, Doris E.....723 S. Westnedge Ave., Kalamazoo
 Dana, Robert L.....228 W. Cedar St., Kalamazoo
 Decker, W. A.....Kalamazoo State Hosp., Kalamazoo
 Delbert, Stewart G.....914 S. Burdick, Kalamazoo
 DeLong, Robert E.....Borgess Hospital, Kalamazoo
 DePree, Harold E.....216 Bronson Med. Center, Kalamazoo
 Dew, Robert R.....252 E. Lovell, Kalamazoo
 DeWitt, Norman L.....802 Hanselman Bldg., Kalamazoo
 Dick, Leo A.....611 Howard St., Kalamazoo
 Doezenia, E. R.....516 Whites Road Kalamazoo
 Dowd, B. J.....1700 Gull Rd., Kalamazoo
 Doyle, Frederick M.....611 Howard St., Kalamazoo
 Duggar, J. A. (A).....Upjohn Co., Kalamazoo
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 Estill, Don V.....414 W. Patterson St., Kalamazoo
 Fancher, J. A. (A).....301 Henrietta St., Kalamazoo

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 Fath, August F.....136 E. Michigan Ave., Kalamazoo
 Finton, Max A.....252 E. Lovell, Kalamazoo
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 Gerstner, Louis W.....420 John St., Kalamazoo
 Gladstone, W. S.....458 W. South St., Kalamazoo
 Glaser, D. F.....463 Academy St., Kalamazoo
 Goodhue, Lolita G.....2503 W. Main St., Kalamazoo
 Grant, Frederick E. (L).....214 Douglas Ave., Kalamazoo
 Green, Wm. L.....136 E. Michigan Ave., Kalamazoo
 Gregg, U. Sherman (L).....334 S. Park St., Kalamazoo
 Grekin, R. H.....136 E. Michigan Ave., Kalamazoo
 Haddock, D. A., Jr.....6646 Portage Ave., Kalamazoo
 Hailman, H. F. (A).....Upjohn Company, Kalamazoo
 Hammer, J. M.....100 Maple St., Parchment
 Hanson, Curtis M.....217 Bronson Med. Center, Kalamazoo
 Harrell, Frank.....420 John St., Kalamazoo
 Harrelson, Wm. D.....136 E. Michigan Ave., Kalamazoo
 Hawk, E. A. (A).....Upjohn Co., Kalamazoo
 Hayner, R. A.....2817 Portage St., Kalamazoo
 Heersma, H. S.....252 E. Lovell, Kalamazoo
 Heinle, Robert.....The Upjohn Co., Kalamazoo
 Herbert, Walter N.....1223 So. Park St., Kalamazoo
 Hersey, E. Freeman.....516 Whites Rd., Kalamazoo
 Hersey, Margaret S.....4407 Bronson Blvd., Kalamazoo
 Hildreth, R. C.....458 W. South St., Kalamazoo
 Hodgman, Albert B.....612 Douglas Ave., Kalamazoo
 Hoebeke, W. G.....212 Bronson Med. Center, Kalamazoo
 Holder, Charles O.....Kalamazoo State Hosp., Kalamazoo
 Howard, R. Grant.....Borgess Hosp., Suite 583, Kalamazoo
 Howard, Willard H.....1602 Gull Rd., Kalamazoo
 Hubbell, R. J.....252 E. Lovell St., Kalamazoo
 Huyser, Wm. C.....427 S. Burdick St., Kalamazoo
 Irwin, Wm. D.....805 Hanselman Bldg., Kalamazoo
 Jennings, R. M.....Box A, Kalamazoo
 Johnson, F. T. (A).....301 Henrietta St., Kalamazoo
 Kavanaugh, Wm. R.....612 Douglas Ave., Kalamazoo
 Kercher, E. F.....224 E. Cedar St., Kalamazoo
 Kilgore, Robert N.....252 E. Lovell St., Kalamazoo
 Klerk, Wm. J.....914 S. Burdick St., Kalamazoo
 Koestner, Paul A.....1303 Portage, Kalamazoo
 Kuizenga, M. R. (A).....Upjohn Company, Kalamazoo
 Lavender, Howard C.....710 Hanselman Bldg., Kalamazoo
 Lawrence, J. O.....1409 Henderson Dr., Kalamazoo
 Lemmer, R. A.....252 E. Lovell St., Kalamazoo
 Light, Richard U.....828 W. South St., Kalamazoo
 Light, S. Rudolph.....136 E. Michigan Ave., Kalamazoo
 Littig, John D.....815 Am. Nat'l Bank Bldg., Kalamazoo
 Locklin, W. Kaye.....136 E. Michigan Ave., Kalamazoo
 Loynd, J. W.....1324 South Park St., Kalamazoo

MacDonald, Marshall A.....319 Bronson Med. Center,
Kalamazoo
Mac Gregor, J. R.....100 Maple St., Parchment
Machin, Harold A.....420 John St., Kalamazoo
Malone, James G.....420 John St., Kalamazoo
Margolis, Frederick J.....2901 S. Westnedge, Kalamazoo
Marshall, Don.....252 E. Lovell St., Kalamazoo
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Marshall, Wm. P.....160 Edgemoor Ave., Kalamazoo
Martens, Irvin J.....Borgess Hosp., Gull Rd., Kalamazoo
May, Donald G.....516 White Rd., Kalamazoo
McCarthy, Joseph S.....1005 Oakland Dr., Kalamazoo
McDougal, Rachael.....252 E. Lovell St., Kalamazoo
McManus, J. M.....1416 Academy St., Kalamazoo
Mellis, Richard.....516 Whites Rd., Kalamazoo
Moe, Carl R.....1324 S. Park St., Kalamazoo
Morter, Roy A.....2421 Sheffield Dr., Kalamazoo
Neerken, A. J.....1318 Am. Nat'l Bldg., Kalamazoo
Nicholson, R. M.....252 E. Lovell St., Kalamazoo
O'Donovan, C. J.....1562 Spruce St., Kalamazoo
Overbey, Charles B.....State Hospital, Kalamazoo
Patmos, Martin.....306 Bronson Med. Center, Kalamazoo
Peake, C. O.....252 E. Lovell St., Kalamazoo
Pearson, Edwin O.....458 W. South St., Kalamazoo
Peelen, J. W.....516 Whites Road, Kalamazoo
Peelen, Matthew.....320 Bronson Med. Center, Kalamazoo
Peltier, H. C. (A).....Upjohn Co., Kalamazoo
Perry, Clifton W.....136 E. Michigan Ave., Kalamazoo
Pinkham, R. A.....316 Henrietta St., Kalamazoo
Prentice, Hazel R.....463 Academy St., Kalamazoo
Pullon, Alton E.....1223 South Park St., Kalamazoo
Rasmussen, Leo B.....152 N. Main, Vicksburg
Reames, Harold R.....The Upjohn Co., Kalamazoo
Rigterink, Gerald H.....136 E. Michigan Ave., Kalamazoo
Roberts, Millard S.....136 E. Michigan Ave., Kalamazoo
Rockwell, Donald C.....136 E. Michigan Ave., Kalamazoo
Rogers, R. J.....126 N. Kalamazoo, Vicksburg
Rutherford, P. S.....Borgess Hospital, Kalamazoo
Ryan, Frederick C.....507 S. Burdick, Kalamazoo
Sage, E. D. (L).....902 Hanselman Bldg., Kalamazoo
Scherer, Flora.....525 Edgemoor St., Kalamazoo
Scholten, D. J. (L).....522 S. Burdick, Kalamazoo

Scholten, Roger A.....252 E. Lovell St., Kalamazoo
Scholten, Wm. (R).....Kalamazoo State Hosp., Kalamazoo
Schrier, C. M.....Kalamazoo State Hosp., Kalamazoo
Schrier, Paul G.....317 Bronson Med. Center, Kalamazoo
Schrier, Thomas.....1008 Dwillard Dr., Kalamazoo
Scott, Wm. A.....208 Bronson Med. Center, Kalamazoo
Shackleton, Wm. E. (R).....420 S. Rose St., Kalamazoo
Shook, Ralph W.....136 E. Michigan Ave., Kalamazoo
Siemens, W. J.....316 Bronson Med. Center, Kalamazoo
Simpson, Bernard W.....610 S. Burdick St., Kalamazoo 8
Sisk, Wilfred N.....Upjohn Co., 301 Henrietta St.,
Kalamazoo
Slatmyer, Karel R.....605 Hanselman Bldg., Kalamazoo
Smith, T. C.....Kalamazoo State Hosp., Kalamazoo
Sofen, Morris B.....603 Kalamazoo Nat'l Bank Bldg.,
Kalamazoo
Southworth, Maynard N.....Box 36, Schoolcraft
Stewart, Wm. C., Jr.....244 Cedar St. E., Kalamazoo
Stiller, A. F.....Southwestern Michigan TB San.,
1500 Blakslee St., Kalamazoo
Stodden, Charlotte (A).....2216 Sheffield Dr., Kalamazoo
Stryker, H. H.....903 Edgemoor, Kalamazoo
Talley, R. W.....The Upjohn Co., Kalamazoo
Tucker, H. A. (A).....Upjohn Co., Kalamazoo
Upjohn, E. G.....Upjohn Co., 301 Henrietta St.,
Kalamazoo
VanderVelde, Kenneth M.....320 Bronson Med. Center,
Kalamazoo
Verhage, Martin D.....228 W. Cedar, Kalamazoo
Volderauer, John C.....458 W. South St., Kalamazoo
Warnke, Robert D.....136 E. Michigan Ave., Kalamazoo
Weadon, Preston S.....252 E. Lovell St., Kalamazoo
Webb, Joseph (A).....301 Henrietta St., Kalamazoo
Wenner, W. F. (A).....1715 Cambridge Rd., Kalamazoo
Wickliffe, R. C. M.....136 E. Michigan Ave., Kalamazoo
Wilbur, E. P. (L).....1730 Dover Rd., Kalamazoo 38
Williamson, Edwin M.....315 Bronson Med. Center,
Kalamazoo
Wu, Jack Foy.....810 East Center Ave., Kalamazoo
Young, Edgar (A).....Upjohn Co., Kalamazoo
Youngs, A. S. (L).....416 S. Burdick, Kalamazoo
Youngs, Cyril A.....416 S. Burdick, Kalamazoo
Zolen, Margaret H.....628 S. Park, Kalamazoo

KENT COUNTY

Adams, Frank A.....526 Leonard St. N.W., Grand Rapids
Aitken, G. T.....54 College Ave. S.E., Grand Rapids 3
Albers, G. Donald.....203 Paris Ave. S.E., Grand Rapids
Albers, Robert (A).....244 Union S.E., Grand Rapids
Aldridge, C. W., Jr.....1516 Wealthy St., S.E.,
Grand Rapids
Alfenito, Felix S.....26 Sheldon Ave. S.E., Grand Rapids
Alger, G. D.....2060 Alpine Ave. N.W., Grand Rapids
Allen, R. V.....1669 Plainfield N.E., Grand Rapids
Anderson, K. A. (A).....505 Cherry S.E., Grand Rapids
Andre, Harvey M.....500 Cherry St., Gand Rapids
Avery, Noyes L.....833 Lake Dr. S.E., Grand Rapids
Baert, George H. (L).....631 S. Prospect, Grand Rapids
Baker, A. J. (L).....74-88 Ionia Ave. N.W., Grand Rapids
Ballard, Milner S.....146-156 Monroe N.W., Grand Rapids
Balyeat, Gordon W.....1810 Wealthy St. S.E.,
Grand Rapids
Barofsky, G. F.....808 Alger St. S.E., Grand Rapids
Bartek, G. L.....110 E. Fulton St., Grand Rapids
Basinger, C. E.....1810 Wealthy St. S.E., Grand Rapids
Baum, W. C.....26 Sheldon Ave. S.E., Grand Rapids
Beaton, James H.....1516 Wealthy St. S.E., Grand Rapids
Beeman, Carl B.....833 Lake Dr. S.E., Grand Rapids
Beets, W. Clarence.....124 E. Fulton St., Grand Rapids
Bell, Charles M.....54 College Ave. S.E., Grand Rapids
Benjamin, H. G.....72 Sheldon Ave. S.E., Grand Rapids
Bennett, W. Bruce.....1632 Leonard St. N.W.,
Grand Rapids
Bennett, W. D.....1514 Wealthy St. S.E., Grand Rapids

Benson, Roland R.....250 Cherry St. S.E., Grand Rapids
Bergsma, Stuart (A).....Eastern State Hosp.,
Williamsburg, Virginia
Bettison, Wm. L. (A).....312 Baltimore, N.E.
Grand Rapids
Beukema, Marenus J.....6850 S. Division, Grand Rapids
Bignall, C. Rexford.....146-156 Monroe Ave. N.W.,
Grand Rapids
Blackburn, Henry M.....110 E. Fulton St., Grand Rapids
Blocksma, Ralph.....201 Medical Arts Bldg., Grand Rapids
Boelkins, Richard C.....125 Fountain N.E., Grand Rapids
Boerman, W. J. (M).....1854 S. Division, Grand Rapids
Boersma, Donald.....26 Sheldon S.E., Grand Rapids
Boet, Frank A. (L).....849 Scribner N.W., Grand Rapids
Boet, John T.....2339 Wyoming Ave. S.W., Grand Rapids
Bolt, Robert J. (A).....University Hosp., Ann Arbor
Bond, George L. (L).....Rapid City
Bonzelaar, Marvin.....2748 Easton S.E., Grand Rapids
Booher, Craig E.....1810 Wealthy St. S.E., Grand Rapids
Bosch, Leon C.....26 Sheldon Ave. S.E., Grand Rapids
Bowman, H. E.....250 Cherry S.E., Grand Rapids
Boyce, D. C.....507 Loraine Bldg., Grand Rapids
Brace, F. C.....1498 Lake Dr. S.E., Grand Rapids
Bratt, H. J.....100 Michigan St. N.E., Grand Rapids
Braunschneider, G. E.....1632 W. Leonard St.,
Grand Rapids
Brayman, Charles W. (L).....Cedar Spring
Brink, J. Russell.....54 College Ave. S.E., Grand Rapids
Brotherhood, James S. (L).....3239 Scenic Dr., Muskegon

Buist, S. J. (A).....55 Sheldon S.E., Grand Rapids
 Bull, Frank L.....72 East Division, Sparta
 Bultema, James (A).....4017 Highgate Rd., Muskegon
 Burleson, John S.....531 Greenwood S.E., Grand Rapids
 Burling, Wesley M.....758 Michigan St. N.E.,
 Grand Rapids
 Burroughs, Frank M., Jr.....11 Wilson, Grandville
 Butler, Wm. J. (A).....26 Sheldon Ave. S.E., Grand Rapids
 Byers, E. J. (L).....511 Ethel Ave. S.E., Grand Rapids 6
 Byrd, Mary Lou.....700 Kent Hills Dr. N.E., Grand Rapids
 Capps, S. C.....100 Michigan St. N.E., Grand Rapids
 Carbeck, R. B. (A).....247 Madison Ave. S.E.,
 Grand Rapids
 Carpenter, L. C.....54 College Ave. S.E., Grand Rapids
 Caukin, H. S.....500 Clancy S.E., Grand Rapids
 Cayce, William.....26 Sheldon Ave. S.E., Grand Rapids
 Chandler, Donald.....74-88 Ionia N.W., Grand Rapids
 Chase, R. J.....833 Lake Dr. S.E., Grand Rapids
 Clahassey, E. G.....54 College Ave. S.E., Grand Rapids
 Clawson, C. K.....445 Cherry St. S.E., Grand Rapids
 Claytor, Robert W.....1424 Madison Ave. S.E.,
 Grand Rapids
 Collins, W. T.....1840 Wealthy St. S.E., Grand Rapids
 Corbus, Burton R. (L).....325 Union Ave. S.E.,
 Grand Rapids
 Crane, H. D.....2221 Madison Ave. S.E., Grand Rapids
 Cremer, J. A.....911 Leonard St. N.W., Grand Rapids
 Crissman, R. K.....2747 Clyde Pk. S.W., Grand Rapids
 Currier, F. P.....955 Floral S.E., Grand Rapids
 Dales, E. W. (L).....146 Monroe Ave. N.W.,
 Grand Rapids 2
 Damstra, Harold J.....1553 Boston S.E., Grand Rapids
 Dassel, Paul M.....110-116 E. Fulton St., Grand Rapids
 Davis, David B.....403 Medical Arts Bldg.,
 26 Sheldon Ave. S.E., Grand Rapids
 Davis, R. A.....4255 Kalamazoo Ave. S.E., Grand Rapids
 Dawson, W. Douglas.....26 Sheldon Ave. S.E.,
 Grand Rapids
 Dean, Alfred (L).....Sagola
 DeBoer, Clarence J.....11 S. Wilson St., Grandville
 DeBoer, Guy W.....26 Sheldon Ave. S.E., Grand Rapids
 DeMaagd, Gerald.....143 Courtland, Rockford
 DeMol, Richard J.....1414 Eastern S.E., Grand Rapids
 Denham, R. H.....54 College Ave. S.E., Grand Rapids 3
 DePree, Isla G.....12 Monroe N.E., Grand Rapids
 DePree, Joseph.....1810 Wealthy St. S.E., Grand Rapids
 DeVel, Leon.....739 Plymouth S.E., Grand Rapids
 DeVries, Daniel.....1414 Eastern S.E., Grand Rapids
 Dewey, Kent A.....26 Sheldon Ave. S.E., Grand Rapids
 Dick, Mark W.....146-156 Monroe Ave. N.W.,
 Grand Rapids
 Diskey, Donald G.....634 Bridge N.W., Grand Rapids
 Dixon, Willis L.....26 Sheldon Ave. S.E., Grand Rapids
 Docter, Leubert L.....26 Sheldon Ave. S.E.,
 Grand Rapids
 Doran, F. L.....110 E. Fulton St., Grand Rapids
 Doyle, J. L.....2402 Eastern S.E., Grand Rapids
 Dyer, David P.....62 Ransom N.E., Grand Rapids
 Eaton, Robert M.....12 Burton S.E., Grand Rapids
 Ebling, John (M).....2225 Englewood S.E., Grand Rapids
 Eckmann, B. H.....700 Fuller Ave. N.E., Grand Rapids
 Edholm, C. D. (A).....250 Cherry St. S.E.,
 Grand Rapids
 Eggleston, H. R.....117 Page N.E., Grand Rapids
 Eldersveld, H. C.....26 Sheldon Ave. S.E., Grand Rapids
 Ellis, M. E.....242 Jefferson S.E., Grand Rapids
 Failing, John F.....110-116 E. Fulton St., Grand Rapids
 Falbisaner, G. J.....3000 Monroe Ave. N.E.,
 Grand Rapids
 Farber, C. E.....54 College Ave. S.E., Grand Rapids
 Faust, Lawrence W.....26 Sheldon Ave. S.E.,
 Grand Rapids
 Feenstra, L. H. (A).....1470 Burke Ave. N.E.,
 Grand Rapids 5
 Feldhaus, Henry, Jr.....456 Cherry St. S.E., Grand Rapids
 Fellows, Kenneth E.....110-116 E. Fulton St.,
 Grand Rapids
 Ferguson, James A.....72 Sheldon S.E., Grand Rapids
 Ferguson, Lynn A.....72 Sheldon S.E., Grand Rapids
 Ferrand, Louis G.....3 N. Monroe, Rockford
 Fitts, Ralph L.....54 College Ave. S.E., Grand Rapids
 Fitzgerald, Erwin.....54 College Ave. S.E., Grand Rapids
 Flintoff, W. M.....754 West Fulton, Grand Rapids
 Flynn, J. Donald.....211 Medical Arts Bldg.,
 26 Sheldon Ave. S.E., Grand Rapids
 Fochtman, T. W.....72 E. Division, Sparta
 Foshee, J. C.....124 E. Fulton St., Grand Rapids
 Foxworthy, J. P.....54 College Ave. S.E., Grand Rapids
 Frantz, Charles H.....1810 Wealthy St. S.E.,
 Grand Rapids
 Fuller, E. H., Jr.....78-88 Ionia Ave. N.W.,
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 Fuller, W. J.....833 Lake Dr. S.E., Grand Rapids
 Gamm, Kenneth E.....1516 Wealthy St. S.E.,
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 Gibbs, Floyd F.....4327 Division Ave., Grand Rapids
 Gilbert, Ralph H.....110-116 E. Fulton St., Grand Rapids
 Gillett, F. S.....54 College Ave. S.E., Grand Rapids
 Good, C. R.....2749 Clyde Park Ave. S.W., Grand Rapids
 Gosling, R. J. (M).....Harlan Memorial Hospital,
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 Gouwens, W. E.....3000 Monroe Ave. N.W.,
 Grand Rapids
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 Grass, Edward J.....833 Lake Dr. S.E., Grand Rapids
 Gray, Fred B.....26 Sheldon Ave. S.E., Grand Rapids
 Graybiel, George P.....Cherry Valley S.E., Caledonia
 Griffith, L. S.....54 College Ave. S.E., Grand Rapids
 Grosenbaugh, C. H. (A).....Winter VA Hospital,
 Topeka, Kan.
 Gunn, J. A.....1840 Wealthy St. S.E., Grand Rapids
 Gunning, Robert E. L.....1960 Michigan N.E.,
 Grand Rapids
 Haack, William, Jr.....1414 Eastern S.E., Grand Rapids
 Hagerman, D. B.....26 Sheldon Ave. S.E., Grand Rapids
 Hamp, Arthur K.....833 Lake Dr. S.E., Grand Rapids
 Hayes, L. W., Sr.....Howard City
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 Grand Rapids
 Heetderks, Dewey R.....26 Sheldon S.E., Grand Rapids
 Helder, Louis (A).....250 Cherry St. S.E.,
 Grand Rapids 3
 Herrick, Ruth.....26 Sheldon Ave. S.E., Grand Rapids
 Hesselschwerdt, D. W.....932 Floral Dr. S.E.,
 Grand Rapids
 Hill, A. Morgan.....54 College Ave. S.E., Grand Rapids
 Hill, Thomas B.....103 W. Main St., Lowell
 Hoeksema, R. H. (A).....28 Michigan N.E.,
 Grand Rapids
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Jensen, William B., Jr.....3147 Bonnell S.E., Grand Rapids
Johns, Donald C.....734 Alger S.E., Grand Rapids
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Johnston, William L.....110 E. Fulton St., Grand Rapids
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Krhovsky, F. J. (A).....250 Cherry St. S.E., Grand Rapids
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List, Carl F.....833 Lake Dr. S.E., Grand Rapids
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Thompson, F. D.....333 Gladstone Ave. S.E.,
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Van Solkema, Arthur.....64 State W., Grandville
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Waterman, Donald F.....535 Greenwood S.E.,
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 Winter, Garrett E.....1967 Godfrey S.W., Grand Rapids
 Wright, Thomas B.....1571 Wealthy S.E., Grand Rapids
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LAPEER COUNTY

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 Burley, David H. (L).....Almont
 Chapin, Clarence D. (L).....Columbiaville
 Conaway, Charles.....Lapeer
 Dorland, Clarke.....Lincoln Street, Lapeer
 Doty, James R.....Clay Street, Lapeer
 Greaver, Cornell Jr.,.....North Branch
 Heitsch, Wm. C.....Lapeer
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 Zolliker, C. R.....P.O. Drawer A, Lapeer

LENAWEE COUNTY

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 Benz, Carl A.....308 N. Broad St., Adrian
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 Blanchard, L. E.....301½ W. Main St., Hudson
 Blanden, Merwin R.....416 E. Pott St., Tecumseh
 Claxton, W. T.....136 Chicago St., Britton
 Coak, R. D.....Ford Bldg., Tecumseh
 Cook, C. L.....135 W. Chicago, Tecumseh
 Dustin, Richard E.....103 W. Brown St., Tecumseh
 Eddy, H. R. C.....Adrian Professional Bldg., Mill St.,
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 Fitzsimmons, F. J.....128 E. Butler St., Adrian
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 Hammel, Richard T.....401 E. Chicago St., Tecumseh
 Hanna, R. J.....119 W. Church St., Adrian
 Harrison, Robert E.....418 W. Adrian St., Blissfield
 Heffron, Charles H.....909 E. Butler, Adrian
 Heffron, C. Harold.....231 N. Main St. Adrian
 Heffron, Howard H.....231 N. Main St., Adrian
 Helzerman, Ralph F.....112 S. Ottawa St., Tecumseh
 Hewes, William H.....146 E. Maumee St., Adrian
 Hinshaw, Warren V.....139½ N. Main St., Adrian
 Hornsby, W. B. (L).....132 E. Chicago St., Clinton
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 Miller, Perry L.....310 E. Maumee, Adrian
 O'Connor, A. R.....122 Locust St., Clinton
 Parker, D. A.....454 S. Main St., Adrian
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 Skuffs, Xenophon.....123 E. Chestnut, Adrian
 Stark, Emily S.....108 Clinton, Adrian
 Stewart, L. C.....114 E. Front St., Adrian
 Thompson, J. R., Jr.....114 Nat'l Bank Bldg., Adrian
 Tubbs, R. V.....120 E. Adrian St., Blissfield
 VanDusen, Chad A. (L).....R.F.D. #2, Blissfield
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Scher, Sydney.....	132 Cass Ave., Mt. Clemens
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Dury, Charles P.....	414 E. Hewitt,	Marquette

Elzinga, Eugene R.....	315 N. Front St.,	Marquette
Erickson, A. W.....	540 E. Division St.,	Ishpeming
Erickson, D. W.....	Ishpeming Hosp.,	Ishpeming
Fennig, F. A.....	315 N. Front St.,	Marquette
Green, S. J.....		Gwinn
Harkin, John C.....	207 Savings Bank Bldg.,	Marquette
Hettle, P. J.....	Savings Bank Bldg.,	Marquette
Hirwas, C. L.....	Huetter Bldg.,	Marquette
Hornbogen, D. P.....	Hornbogen Bldg.,	Marquette
Howe, Lloyd W.....	Savings Bank Bldg.,	Marquette
Jaedecke, R. G.....	829 Croix Street,	Negaunee
Johnson, R. R.....	W. Washington St.,	Marquette
Kane, Elizabeth D.....	418 W. Magnetic,	Marquette
Knutson, George O.....	829 Croix Street,	Negaunee

Koenig, Harry.....Nester Block, Washington St.,
Marquette
Kronschabel, E. F. (A).....Gwinn
Lambert, W. C.....Huetter Bldg., Marquette
LeGolvan, Celestin (L).....221 W. Washington St.,
Marquette
LeGolvan, P. C. (M).....USN Medical Research
Unit Rt. 3, APO 231, Box E, % PM, N.Y., N.Y.
Lyons, James W., Jr.....First Nat'l Bldg., Marquette
Matthews, Norman L.....St. Lukes Hospital, Marquette
Moore, B. E.....524 Mather St., Ishpeming
Mudge, William A.....108 Ridge Street, Negaunee
Narotzky, Archie S.....200 S. Main St., Ishpeming

Paine, R. L.....416 Teal Lake, Negaunee
Rosenbaum, Louis524 Mather, Ishpeming
Schultz, M. H.....114 N. Front St., Marquette
Schweinsberg, Sara D. (A).....6501 Haverford,
Philadelphia, Pa.
Sicotte, Isaiah (L).....Michigamme
Stein, P. G.....110 S. Front St., Marquette
Swinton, A. L. (L).....Savings Bank Bldg., Marquette
Tearnan, Raymond A.....Munising
Van Riper, Paul (L).....Champion
Wickstrom, George B.....Madigan Bldg., Munising
Williams, R. G.....524 Mather St., Ishpeming
Wright, K. C.....3156 Lake Shore Blvd., Marquette

MASON COUNTY

Bacon, Herbert G., Jr.....Scottville
Boldyreff, Ephraim B.....Custer
Boon, A. F.....203 N. Ferry, Ludington
Carney, John R.....202 N. Park, Ludington
Carney, Ruth V. C.....202 N. Park, Ludington
Goulet, Leo J.222 S. James St., Ludington
Hoffman, H. B.....121 E. Ludington, Ludington

Kleinschmidt, Gladys.....Court House Bldg., Ludington
Martin, William S.....107 W. Ludington Ave., Ludington
Morrow, W. J.....N. James St., Ludington
Ostrander, Robert A.121 Ludington Ave., Ludington
Paukstis, Charles A.....111 Court St., Ludington
Slaybaugh, James C.....101 W. Loomis Street, Ludington

MECOSTA COUNTY

Bruggema, Jacob.....Evert
Chess, Leo F.....232 Chestnut Street, Reed City
Franklin, Benjamin L. (L).....Remus
Haldeman, Jack.....126 Maple, Big Rapids
Hickox, L. A.....430 Morris S.E., Grand Rapids
Ivkovich, Paul.....111 S. Chestnut St., Reed City
Kilmer, David N.....102½ Upton, Reed City
Kilmer, Paul B.....102½ Upton, Reed City
Kowaleski, Edward H.....Remus

Merlo, Frank A.....206 S. Michigan Ave., Big Rapids
Nelson, Lorenzo R.....Baldwin
Peck, Louis K. (L).....Barryton
Rood, R. C.....282 N. Cass St., Morley
Treyner, Thomas P.....126 Maple Street, Big Rapids
Tyson, J. L.....324 Mecosta Ave., Big Rapids
Van Auker, E. W.....229 S. Warren, Big Rapids
Walters, J. E.....126 Maple, Big Rapids
White, John A.....121 S. Michigan Ave., Big Rapids

MENOMINEE COUNTY

Agneberg, Nils O.....531 First St., Menominee
Bruckardt, Herman R.....534 First St. Menominee
Clay, J. W.....1146 Tenth Ave., Menominee
DeWane, Francis J.....413 Tenth Ave., Menominee
Flanagan, Clarence B.....623 First St., Menominee
Glickman, L. Grant.....958 First St., Menominee
Gonty, ArthurSt. Josephs Hospital, Menominee
Heidenreich, John R.....Daggett

Hopson, G. H.....104 Tenth Ave., Menominee
Hopson, Patricia C.....104 Tenth Ave., Menominee
Jones, William S.....1146 10th Ave., Menominee
Jones, W. S., Jr.....1146 10th Ave., Menominee
Kerwell, Karm C.....Stephenson
Olson, R. C.....104 Tenth Ave., Menominee
Sethney, Henry T. (L).....3313 East 22nd St., Tuls
Towey, John W.....Pinecrest San., Power

MIDLAND COUNTY

Ashcom, Richard.....110 W. Sugnet, Midland
Ballmer, Robert S.....2715 Ashman St., Midland
Bernier, J. A.....Sanford
Blackhurst, J. F.....2715 Ashman St., Midland
Blackhurst, R. T.....Blackhurst Bldg., Midland
Bowsher, Robert E.....2719 Ashman St., Midland
Bridge, R. G.....2715 Ashman, Midland
Bulmer, Dan J.....116 Harold St., Midland
Buskirk, M. D.....110 W. Sugnet, Midland
Devlin, James.....224 E. Larkin, Midland
Ellis, Ruth.....124 Townsend St., Midland
Gay, Harold H.....Dow Chemical Co., Midland
Gordon, Harold L.....1423 Clover Lane, Midland
Grant, Robert.....116 Harold St., Midland
Grew, Norman C.....347½ E. Main St., Midland
Gronemeyer, William H.....110 W. Sugnet, Midland
Haberstroh, Colleen.....907 Eastman, Midland
Holder, Benjamin B.....Dow Medical Dept., Midland

Howe, I. M.....110 W. Sugnet, Midlan
Howell, R. H.....709 Maple St., Midlan
Ittner, Martin J.....217 N. Saginaw Rd., Midlan
Kaasa, Laurin J.....4005 Orchard Dr., Midlan
Linsenmann, Karl W.....312 E. Main St., Midlan
Marks, V. A.....119 Gordon St., Midlan
Maynard, W. A.....Colema
Meisel, Edward H., Jr.....413 Lingle Lane, Midlan
Moench, Fred.....401 W. Main St., Midlan
O'Hara, Bernard.....110 W. Sugnet, Midlan
Pike, Melvin H.....224 E. Larkin St., Midlan
Pollock, Robert.....Masonic Bldg., Midlan
Poznak, Leonard A.....1411 Crane Ct., Midlan
Randolph, Stephen H.....117 Gordon St., Midlan
Schoff, C. A.....2912 Ashman St., Midlan
Stewart, RichardDow Medical Dept., Midlan
Towsley, W. D.....Blackhurst Bldg., Midlan
Ulmer, George.....Midland Hospital, Midlan
Willison, Charles H.....122 Towsend, Midlan

MONROE COUNTY

Ames, Florence D.....2 W. Noble Ave., Monroe
 Barrett, C. D.....218 E. First St., Monroe
 Blakey, L. C.....222 N. Monroe St., Monroe
 Bond, W. W.....4 East Front St., Monroe
 Cigany, Zoltan B.....1402 Monroe, Carleton
 Diehl, Joy O. Stephenson.....15463 S. Dixie Highway,
 Monroe
 Douglas, D. W.....17 E. First St., Monroe
 Ewing, R. T.....130 Maple Blvd., Monroe
 Flanders, J. P.....31 Washington, Monroe
 Frary, R. A.....423 E. Elm Ave., Monroe
 Freud, John W.....222 N. Monroe, Monroe
 Hensel, Hilda M.....12 East Fourth, Monroe
 Hnaczuk, NicholasPetersburg
 Hunter, M. A.....35 East Front St., Monroe
 Johnson, A. Esther.....31 Washington Ave., Monroe
 Kelso, S. Newton, Jr.....127 E. Front St., Monroe
 Laboe, Edward W.....725 N. Monroe, Monroe
 Lammers, Gerald P.....Ida

Loan, G. B.....31 Washington St., Monroe
 Long, Edgar C.....1310 N. Macomb St., Monroe
 McDonald, T. A.....17 E. Elm Ave., Monroe
 McGeoch, R. W.....718 N. Macomb, Monroe
 McMillin, J. H.....423 E. Elm St., Monroe
 Meier, Walter A.....106 E. Front St., Monroe
 Middleton, W. J. S.....219 W. Front St., Monroe
 Newcomer, S. R.....AT & SF Hospital, Topeka, Kansas
 Parmelee, O. E. (L).....Lambertville
 Pinkus, Hermann K. B.....12 E. Fourth St., Monroe
 Reisig, Albert H.....9 S. Monroe St., Monroe
 Sanger, Emerson J. J.....530 S. Monroe St., Monroe
 Sisman, B. J.....325 N. Monroe St., Monroe
 Streicher, R. G.....729 N. Monroe St., Monroe
 Tomlinson, Ledyard H.....Newport
 Wagar, Spencer H.....31 Washington St., Monroe
 Weeks, V. L.....326 N. Monroe, Monroe
 Wilkins, Rolland W.....105 E. Front St., Monroe
 Williams, Robert J.....31 Washington St., Monroe
 Williamson, George W.....284 Tecumseh St., Dundee

MUSKEGON COUNTY

Allen, R. T.....1891 Lake Shore Dr., Muskegon
 Anderson, A. J.....1371 Peck St., Muskegon
 Anderson, Axel W.....Lakewood Club, Twin Lake
 Atkinson, Annie L.....1019 Green Creek Road, Rt. 2,
 Muskegon
 August, R. V.....72 E. Broadway, Muskegon Heights
 Barnard, Helen S.....Nedean Building, Muskegon
 Barnes, J. W.....102 Professional Bldg., Montague
 Benedict, Arthur L.....22 W. Southern Ave., Muskegon
 Bloom, R. E.....305 Liberty Life Bldg., Muskegon
 Bolthouse, Robert E.....2416 Peck St., Muskegon Heights
 Bond, W. H.....1377 Peck St., Muskegon
 Boyd, D. R.....1735 Peck St., Muskegon
 Bradshaw, Park S.....1014 Jefferson, Muskegon
 Busard, J. Max.....503 Liberty Life Bldg., Muskegon
 Chapin, William S. (A).....2136 Sanford,
 Muskegon Heights
 Christophersen, James W.....1276 Lake Shore Drive,
 Muskegon
 Clapp, Henry W.....83 Strong Ave., Muskegon
 Clark, Harry L. (L).....1450 Leahy St., Muskegon
 Closz, Harold F.....809 Hackley Union Bank Bldg.,
 Muskegon
 Cohan, Sol G.....1114 Second St., Muskegon
 Cronick, Anne B.....1067 Pine St., Muskegon
 Dasler, A. F.....1507 Peck St., Muskegon
 DeLeeuw, Henry.....4090 Highgate St., Muskegon
 Diskin, Frank.....309 Jackson Ave., Muskegon
 Dykhuizen, Harold D.....710 Hackley Union Bank Bldg.,
 Muskegon
 Ellis, Nicholas J.....1891 Lake Shore Dr., Muskegon
 Emerick, Robert W.....878 N. Second St., Muskegon
 Engstrom, Albert D. O.....Whitehall
 Fillingham, Enid.....870 N. Second St., Muskegon
 Fleischmann, C. B.....250 W. Webster, Muskegon
 Fleishman, Norman A.....1094 Jefferson, Muskegon
 Fles, R. J.....1715 Peck St., Muskegon
 Folsom, J. D.....1706 Peck St., Muskegon
 Fugate, E. M.....412 Hackley Union Bldg., Muskegon
 Gaikema, Everett W.....Muskegon Co. Sanitorium,
 North Muskegon
 Garber, Frank W., Jr.....235 Monroe Ave., Muskegon
 Giese, D. H.....210 Lyman Building, Muskegon
 Goltz, Martha H.....Montague
 Greene, Henry P.....840 Pine St., Muskegon
 Griffith, Robert M.....68 E. Broadway, Muskegon Heights
 Hack, D. W.....1075 Jefferson St., Muskegon
 Hanley, W. J.....406 Hackley Union Bldg., Muskegon
 Harryman, James E.....1129 Peck St., Muskegon
 Hartwell, S. W.....450 W. Western Ave., Muskegon

Harvey, J. G. K.....Mercy Hospital, Muskegon
 Heneveld, Edward H.....1603 Peck St., Muskegon
 Heneveld, John (R).....4036 Stanford, Muskegon
 Heneveld, R. G. (A).....1458 Montague Ave., Glenside,
 Muskegon
 Hennessy, Mary E. (A).....1890 Winchester Dr.,
 Muskegon
 Hill, J. K.....1095 Third St., Muskegon
 Holly, Leland E.....878 N. Second St., Muskegon
 Hornbeck, W. J.....Michigan Theater Bldg., Muskegon
 Jesson, R. M.....1129 Peck St., Muskegon
 Joistad, Arthur H., Jr.....878 N. Second St., Muskegon
 Kane, Thomas J.....179 Strong Ave., Muskegon
 Kay, Cecelia S.....1533 Peck Street, Muskegon
 Keilin, Marie (L).....504 Liberty Life Bldg., Muskegon
 Kerr, Howard J.....1441 Lakeshore Drive, Muskegon
 Kleaveland, I. J.....1633 Peck St., Muskegon
 Lange, Eugene W.....Mercy Hosp., 1520 Fifth St.,
 Muskegon
 Lapham, Landon M.....Whitehall
 Lauretti, Emil J.....815 Hackley Bank Bldg., Muskegon
 Laurin, Vilda S.....804 Hackley Bank Bldg., Muskegon
 LeFevre, George L., Jr.....450 W. Western Ave., Muskegon
 LeFevre, William M.....289 W. Western, Muskegon
 Loder, Leonel L.....Hackley Union Bldg., Muskegon
 Lowry, Robert A.....2336 Peck St., Muskegon Heights
 MacLean, D. B.....878 N. Second St., Muskegon
 Maire, L. E.....506 Liberty Life Bldg., Muskegon
 Mandeville, C. B.....515 Hackley Union Bank Bldg.,
 Muskegon
 Maples, Douglas E.....402 Center St., North Muskegon
 McNair, John N.....967 Second St., Muskegon
 Medema, Paul E.....1017 Sanford, Muskegon
 Meengs, Marvin B.....1725 Peck St., Muskegon
 Miller, Philip L.....1755 Peck St., Muskegon
 Mulder, Lambertus.....Hackley Union Bldg., Muskegon
 Mulligan, A. W.....1260 Jefferson St., Muskegon
 Oden, Constantine L. A.....804 Hackley Union Bank
 Bldg., Muskegon
 Paterson, L. C.....1095 Third St., Muskegon
 Pettinga, F. L.....1603 Peck St., Muskegon
 Powers, Lunette I. (L).....c/o Hackley Hosp., Muskegon
 Prentice, Edwin W.....1017 Sanford St., Muskegon
 Price, Leonard.....1282 Arthur St., Muskegon
 Risk, Robert D.....1160 Ransom St., Muskegon
 Scholle, Norbert W.....2500 Peck St., Muskegon Heights
 Sears, Richard.....36 W. Muskegon Ave., Muskegon
 Shebasta, Emil M.....1075 Jefferson, Muskegon
 Stubbart, F. J.....2416 Peck St., Muskegon Heights
 Swedenburg, R. D.....Liberty Life Bldg., Muskegon
 Swenson, Leland L.....1706 Peck St., Muskegon

Tellman, H. Clay.....706 Hackley Union Bank Bldg.,
Muskegon
Thieme, S. W. (L).....Ravenna
Thornton, Eugene S. (L)....802 Hackley Union Bank
Bldg., Muskegon
Toy, Charles M.....1067 Pine St., Muskegon
Tyler, William H.....1435 Peck St., Muskegon
Vanderlaan, John E.....1624 Peck St., Muskegon
Vandervelde, C. A.....703 Hackley Union Bank Bldg.,
Muskegon
Van Gelder, W. C.....Hackley Union Bank Bldg.,
Muskegon

Wagenaar, Edward H.....404 Liberty Life Bldg.,
Muskegon
White, W. G., Jr.....204 Michigan Theatre Bldg.,
Muskegon
Wiersma, Silas C.....Hackley Union Bldg., Muskegon
Wildgen, Bernard C.....416 Hackley Bank Bldg.,
Muskegon
Wilke, Carl A.....Montague
Williams, Edward V.....2404 Jarman St.,
Muskegon Heights
Yegge, J. P.....2212 Peck St., Muskegon Heights

NEWAYGO COUNTY

Carter, Laura J.....Grant
Deur, Theodore R.....Grant
DeYoung, Jess.....111 W. Dayton St., Fremont
Geerlings, Lambert J.....20 N. Division St., Fremont
Klein, J. Paul.....16 W. Sheridan, Fremont
Masters, Brooker L.....111 W. Dayton St., Fremont
Moore, Hugh R.....38 State St., Newaygo

O'Neill, John W.....White Cloud
Painter, RobertGrant
Paxton, Robert E.....40 W. Sheridan, Fremont
Pedelty, NormanNewaygo
VandenBerg, Tunis.....20 N. Division Ave., Fremont
Veenschoten, GirardHesperia
Webb, Roy O.219 Woodrow, Fremont

NORTH CENTRAL COUNTIES

Backe, John C.....Box 434, Gaylord
Barstow, Richard G.....429 N. Center St., Gaylord
Boehm, John D. (R).....West Branch
Clippert, Clarence G.....308 Michigan Ave., Grayling
Coulter, Keith D.....Gladwin
Crandell, Clare H. (R)....420 E. Houghton, West Branch
Dosch, PaulGrayling
Egle, Joseph L.....Northern Michigan TB San., Gaylord
Forney, F. A. (L).....544 North Fairlane, Midland
Hasty, Earl A.....115 Burgess, West Branch
Hayes, Louis F. (M).....USAH AU APO 43,
San Francisco, California
Henig, B. Elmore.....308 Michigan Ave., Grayling
Howarth, ThomasGladwin

Jardine, Hugh M.....109 S. Third St., West Branch
Libke, Robert S.....Gaylord
Martzowka, M. A.....Roscommon
McKillop, G. L.....124 East Main St., Gaylord
Oppy, Charles L.....Roscommon
Palm, G. W.....Prudenville
Peckham, Richard C.....Gaylord
Rodda, E. H.....308 Michigan Ave., Grayling
Schaiberger, George L.....707 W. Hought St.,
West Branch
Stallings, L. E.....Beaverton
Stealy, S. A.P. O. Box 485, Grayling
Timreck, Harold A.....Gladwin
Van Oosten, H. E.....115 Burgess, West Branch

NORTHERN MICHIGAN COUNTIES

Allen, Robert F.....Petoskey
Alm, B. T.Petoskey
Blum, Benjamin B.....Petoskey
Burns, Dean C.....314½ Howard St., Petoskey
Cameron, W. J. (M).....2507 George St.,
Rolling Meadows
Conkle, Guy C. (L).....Boyne City
Conklin, F. L. (A).....Burt Lake
Conti, Joseph B.....Petoskey
Conway, William S.....Burns Clinic, Petoskey
Cooke, Robert F.....Burns Clinic, Petoskey
Crippen, Edward F.....126½ State St., Mancelona
Drake, Gerald, Capt., M.C. (M).....1109 E. Mitchell,
Petoskey
Duffie, Don H. (L).....Central Lake
Elliott, D. C.....Burns Clinic, Petoskey
Frye, S. A.....Harbor Springs
Grate, Lawrence E.....112 Clinton St., Charlevoix
Hegener, A. J.....Petoskey
Hepworth, C. I. (M).....320 N. Huron St., Cheboygan
Hodges, Roy W. (L).....Mackinac City
Kirk, T. R. (M).....Burns Clinic, Petoskey

Larson, Walter E.....320 N. Huron St., Cheboygan
Lawrie, G. K.....816 Spruce St., Petoskey
Lentini, NicholasCheboygan
Lester, V. L.....Petoskey
Litzenburger, Albert F.....Boyne City
Martin, R. G.....103 Clinton St., Charlevoix
Mateskon, V. S.....Burns Clinic, Petoskey
Mayne, Frederick C.....Cheboygan
McKnight, Robert D.....Petoskey
Mertz, Joanne E.....Burns Clinic, Petoskey
Pearson, R. E.....Boyne City
Rauch, C. T.....542 S. Huron St., Cheboygan
Reus, Leonard W.....226 Park Ave., Petoskey
Rodger, John R.....Bellaire
Saltonstall, Gilbert B.....112 Clinton St., Charlevoix
Savory, John H.....East Jordan
Stringham, James R.....225 Backus St., Cheboygan
Taylor, R. M.....1109 E. Mitchell St., Petoskey
Terr, IsaacCharlevoix
Van Dellen, JerrianEast Jordan
Webster, J. W.....Burns Clinic, Petoskey
Weburg, Kathryn D.....Petoskey

OAKLAND COUNTY

Abbott, Vernon C.....1405 Pontiac State Bank Bldg.,
Pontiac
Adair, Robin.....602 N. Woodward, Birmingham
Adams, F. M.....600 N. Woodward, Birmingham
Albert, D. G.....1401 S. Washington, Royal Oak

Albrecht, R. W.....2925 Orchard Lake Rd.
Keego Harbo
Arena, J. A., Jr.....22932 Woodward Ave., Ferndale
Arnkoﬀ, Harry218 Riker Bldg., Pontiac
Ashare, Raymond.....336 Riker Bldg., Pontiac

Aulie, H. G.....500 S. Washington, Royal Oak

Baker, Frederick A. (R).....4575 Motorway Drive, Pontiac

Bannow, Robert J.....880 Woodward Ave., Pontiac

Barker, Charles P.....318 Wabeek Bldg., Birmingham

Barker, Howard B.....880 Woodward Ave., Pontiac

Barrett, John L.....264 Washington, Royal Oak

Bauer, Bruce D.....23005 John R. St., Hazel Park

Bauer, Edward G.....101½ N. Saginaw, Pontiac

Bauer, Ernest W.....23005 John R. St., Hazel Park

Beattie, W. G.125 W. Nine Mile Rd., Ferndale 20

Beck, Otto O.....280 W. Maple, Birmingham

Becker, Anne M. W.....Pontiac State Hosp., Pontiac

Belknap, Warren F.....1809 South Main St.,
Pleasant Ridge

Berger, Charles J.....1413 S. Washington Ave., Royal Oak

Blackwell, Leonard H.....549½ N. Perry St., Pontiac

Blakeney, James.....449 E. Pike St., Pontiac

Blue, Jane.....St. Joseph Hospital, Pontiac

Boileau, T. L.....2075 E. Fourteen Mile Rd., Birmingham

Boucher, R. E.....617 Washington Square Bldg.,
Royal Oak

Bowers, Charles L.....880 Woodward Ave., Pontiac

Brown, A. L.....523 Riker Bldg., Pontiac

Bryant, F. W.....201 Washington Square Bldg., Royal Oak

Budd, A. S.....1999 E. 14 Mile Rd., Birmingham

Buehrig, Robert.....5790 M-15, Clarkston

Bullard, R. W., Jr.....20 S. Main St., Clarkston

Burger, J. H.....1775 E. 14 Mile Rd., Birmingham

Burgess, Charles H.....23235 Woodward Ave., Ferndale

Burke, Chauncey G.....1022 Riker Bldg., Pontiac

Butler, Samuel A. (L).....Pontiac State Hospital, Pontiac

Byberg, Robert A.....500 S. Washington, Royal Oak

Calhoun Ethel T.....30305 Grand River, Farmington

Campbell, Malcolm D.....216 Washington Square Bldg.,
Royal Oak

Carrow, Joyce M.....622 Riker Bldg., Pontiac

Cefai, A. F.....310 Pontiac State Bank Bldg., Pontiac

Chandler, Douglas.....391 Hamilton, Birmingham

Chandler, J. H.....1401 S. Washington, Royal Oak

Cheng, James T.....7350 Cooley Lake Rd., Pontiac 11

Childers, M. A. (A).....880 Woodward Ave., Pontiac

Christensen, W. L.....109 West 11 Mile Rd., Royal Oak

Christie, E. A.....880 Woodward Ave., Pontiac

Christie, J. W.....Northport

Clarke, Harriett A.....32 Murphy St., Pontiac

Cline, A. L.....405 Pontiac State Bank Bldg., Pontiac

Cobb, Leon F.....75½ W. Huron, Pontiac

Cobb, Thomas H.....880 Woodward Ave., Pontiac

Collins, Edward F., Jr.....1040 Riker Bldg., Pontiac

Condon, F. J.....2401 E. Fourth St., Royal Oak

Conner, Edward D.....3856 South Miller Way,
Birmingham

Conrad, C. D.....3027 N. Woodward Royal Oak

Cooley, Roy V.....189 Orchard Lake Ave., Pontiac

Cooper, Robert J.....622 Riker Bldg., Pontiac

Coucke, Henry O.....1148 S. Woodward Ave., Royal Oak

Crissman, H. C.....22748 Woodward Ave., Ferndale

Crowe, F. C. (A).....7350 Cooley Lake Rd., Pontiac

Crum, Roger E.....440 Riker Bldg., Pontiac

Cudney, Ethan B.....159 Marlborough, Pontiac

Dahlgren, Carl W.....301½ Orchard Lake Rd.,
Keego Harbor

Darling, C. G., Jr.....880 Woodward Ave., Pontiac

Darmstaetter, A. A., Jr. (M).....227 Briggs Bldg.,
Birmingham

Delaney, M. M.....23603 Farmington Rd., Farmington

DeLawter, Hilbert H.....277 Pierce, Birmingham

Deutsch, William L.....600 W. First, Huntington Woods

Dobski, Edwin J.....880 Woodward Ave., Pontiac

Drew, D. R.....880 Woodward Ave., Pontiac

Dunlap, Gregg L.....2144 Avondale Dr., Pontiac, 19

Dunn Lewis E.....3924 Twelve Mile Rd., Berkley

Durak, G. G. (M).....USAS Hospital,
West Chicopee Falls, Mass.

Durocher, Normand E.....605 Pontiac State Bank Bldg.,
Pontiac

Dustin, R. W.254 Elizabeth, Newark 8, N. J.

Edwards, J. W. (A).....8400 W. Eight Mile Rd.,
Ferndale

Ekelund, Clifford T.....906 Riker Bldg., Pontiac

Elder, E. E., Jr.....1116 Voorheis, Pontiac

Endress, Z. F.....410 Pontiac State Bank Bldg., Pontiac

Engel, J. B.....235 Linden, Birmingham

Esslinger, J. O.....622 N. Woodward Ave., Birmingham

Evseeff, G. S.....1401 S. Washington, Royal Oak

Farnham, Lucius A. (L).....538 Riker Bldg., Pontiac

Fellner, W. A.....Fisher Body Division, GMC, Pontiac

Ferris, Ralph G.....55 W. Maple, Birmingham

Fink, L. Jerome.....1411 Pontiac State Bank Bldg., Pontiac

Fitzpatrick, Francis J.....818 Peoples Bank Bldg.,
Pontiac

Flick, John R.....120 West Second, Royal Oak

Foust, Earl W.....1625 E. Fourth St., Royal Oak

Fox, Ralph M.....640 N. Woodward, Birmingham

Furlong, Harold A.....940 Riker Bldg., Pontiac

Gaba, H. B.....21721 Dequindre, Hazel Park

Gaber, Ben.....10851 W. Ten Mile Rd., Oak Park

Gadbaw, Joseph J.....23603 Farmington Rd., Farmington

Gaensbauer, Ferdinand.....880 Woodward Ave., Pontiac

Galpin, R. R.....525 Southfield, Birmingham

Garber, M. J.....23606 Farmington, Farmington

Garipey, Bernard F.....109 W. First St., Royal Oak

Gates, E. M.....206-10 Riker Bldg., Pontiac

Gatley, C. R.....97 N. Perry St., Pontiac

Gatley, L. Warren.....97 N. Perry St., Pontiac

Gehringer, Norman F.....880 Woodward Ave., Pontiac

Geib, Ormond D.....First Nat'l Bank Bldg., Rochester

Geist, Edgar J., Jr.....413 Woodward Ave., Rochester

Gell, J. W.....940 Riker Bldg., Pontiac

Gerls, Frank B.....602 Peoples State Bank Bldg., Pontiac

Gibson, James C. (L).....206 E. Commerce, Milford

Gibson, R. E. (A).....277 Briggs Bldg., Birmingham

Gibson, Wellington C.....216 Commerce St., Milford

Gill, Matthew J.....Route 3, Bloomfield Hills

Goerner, Dorothy M.....390 E. Maple, Birmingham

Goldstein, Herbert.....12701 W. Ten Mile Rd., Oak Park

Goode, Norman J.....1117 South Washington, Royal Oak

Gradolph, Paul L.....23338 Woodward Ave., Ferndale

Grant, William A. (L).....Milford

Green, R. S.....c/o The Haven Sanitarium, Rochester

Green, William M.....1402 Pontiac State Bldg., Pontiac

Grekin, T. D.....603 W. Eleven Mile Rd., Royal Oak

Gustafson, Everett.....236 Riker Bldg., Pontiac

Gutterman, Meyer A.....25085 Coolidge Hwy. Oak Park

Haanes, M. A.....Pontiac State Bank Bldg., Pontiac

Hackett, Daniel J.....1205 Peoples State Bldg., Pontiac

Haddock, Douglas A.....Orchard Lake Clinic Pontiac 11

Hagman, George L. (L).....3615 Hunter, Royal Oak

Halsted, Lee H.....33311 Grand River, Farmington

Hammonds, E. E.....209 Wabeek Bldg., Birmingham

Han, Maolin.....3358 Auburn Rd., Auburn Heights

Hardy, George C. (L).....240 Oak Drive, Box 135-G,
R. R. 2, Rochester

Harvey, Campbell.....35 W. Huron Pontiac

Hassberger, J. B.....620 N. Woodward, Birmingham

Hathaway, Clarence L. (L).....1102 Maplegrove,
Royal Oak

Hathaway, William S.....433½ Main St., Rochester

Hauptmann, W. L.....3027 N. Woodward Ave.,
Royal Oak

Henderson, J. E.....4 Barbour Terrace, Bloomfield Hills

Henderson, W. W.....1307 S. Washington, Royal Oak

Hendren, Owen S.....1408 Pontiac State Bank Bldg.,
Pontiac

Henry, Colonel R.....125 W. Nine Mile Rd., Ferndale

Hensley, C. B.....46 W. Flint St., Lake Orion

Hershey, Lynn N.....1100 N. Woodward, Birmingham

Hoekman, Aben.....1740 Hamilton Dr., Rt. 3, Pontiac

Howlett, E. V. (L).....538 Riker Bldg., Pontiac

Hoyt, Donald F.....1203 Pontiac State Bank Bldg.,
Pontiac

Hubert, John R., Jr.....880 Woodward Ave., Pontiac

Hull, Robert P.....23625 Woodward Ave., Ferndale

Hunter, D. G.....440 Riker Bldg., Pontiac

Ignatius, A. A.....1915 E. 9 Mile Rd., Ferndale
 Jacobi, R. C.....37 N. Washington, Oxford
 Jones, L. F.....Oakland County TB San., Pontiac 11
 Karow, Juliette S. (A)....4274 N. Woodward, Royal Oak
 Kazdan, L. L.....13801 W. Nine Mile Rd., Oak Park
 Keefe, Eugene J.....St. Joseph Hospital, Pontiac
 Kemp, Felix J.....880 Woodward Ave., Pontiac
 Kemp, W. L.....525 Southfield Rd., Birmingham
 Kendrick, H. F., Jr.....206 Riker Bldg., Pontiac
 Ketchum, Jesse.....4219 Manor Rd., Royal Oak
 Klewicki, H. A.....22720 Woodward, Ferndale
 Koehler, William H.....4416 Far Hill Drive, Birmingham
 Kozlow, C. S.....4274 N. Woodward Ave., Royal Oak
 Kozlow, Louise E. Ange.....4274 N. Woodward Ave.
 Royal Oak
 Kozonis, M. C.....1301 Pontiac State Bank Bldg., Pontiac
 Kuhn, Anne K.....4274 N. Woodward Ave., Royal Oak
 Kuhn, Henry H.....817 E. Eight Mile Rd., Hazel Park
 Kuhn, R. E.....4274 N. Woodward Ave., Royal Oak
 Kurnetz, Ruben10851 W. Ten Mile Rd., Oak Park
 LaCore, Ivan A.....Pontiac State Hospital, Pontiac
 Lahti, Paul T.....325 Washington Square Bldg.,
 Royal Oak
 LaMarche, Norman O.....2827 Woodward, Berkley
 Lambert, A. G.....3027 Woodward Royal Oak
 Lambie, John S. (L).....280 Aspen Rd., Birmingham
 Landry, R. A.....5807½ Dixie Highway, Waterford
 Larson, Alvin R.....880 Woodward Ave., Pontiac
 Laux, Philip J., Jr.....3027 N. Woodward, Royal Oak
 Leach, Charles A., Jr.....525 Southfield, Birmingham
 Leahy, Etta Link.....600, 11 Mile Rd., Berkley
 Levine, Bernard.....25101 Coolidge, Oak Park
 Lewis, S. M.....400 W. Nine Mile, Ferndale
 Lichtwardt, H. E.....606 Woodward, Birmingham
 Lilly, R. J.....Pontiac State Hospital, Pontiac
 Ling, Theodore W.....23603 Farmington Rd., Farmington
 Linn, H. J.....1522 Kirkway, Rt. 3, Bloomfield Hills
 Lockwood, C. E. (L).....107 Martha St., Holly
 Longyear, H. W.....3019 N. Woodward, Royal Oak
 Lowery, A. J.....1538 Union Lake Rd., Pontiac
 Lyons, R. T.....Riker Bldg., Pontiac
 Margrave, Edmund D.....306 W. Ten Mile Rd.,
 Royal Oak
 Mark, Hansi.....21934 Stephenson Hwy., Hazel Park
 Markle, John G.....1100 N. Woodward, Birmingham
 Markley, John M.....655 Ridge Road, Bloomfield Hills
 Marra, J. J.....Pontiac General Hospital, Pontiac
 Martin, F. A.....24339 Chicago St., Dearborn
 Mason, Robert J.....618 N. Woodward Ave.,
 Birmingham
 McCain, French H.....628 N. Woodward Ave.,
 Birmingham
 McConkie, J. P.....311-2 Wabek Bldg., Birmingham
 McEvoy, F. J.....1715 Crooks Rd., Royal Oak
 McHugh, James M.....Pontiac State Hospital, Pontiac
 McInerney, T. S.....109 W. Eleven Mile Rd., Royal Oak
 McIntyre, Kenneth E.....779 Grand Marais,
 Grosse Pointe Park
 McNeill, H. H.....83½ S. Saginaw, Pontiac
 McPhee, E. C.....738 Riker Bldg., Pontiac
 Mehas, C. P.....300 Hickory Grove, Bloomfield Hills
 Meinke, Herman A.....817 E. 8 Mile Rd., Hazel Park
 Meisner, H. E.....15412 W. Nine Mile Rd., Oak Park
 Mercer, Frank A.....1401 Pontiac State Bank Bldg.,
 Pontiac
 Merrill, Lionel N.....330 Washington Square Bldg.,
 Royal Oak
 Milgrom, Sidney.....1229 W. Washington, Royal Oak
 Miller, Hazen L.....617 Washington Square Bldg.,
 Royal Oak
 Miller, Sidney.....604 N. Woodward Ave., Birmingham
 Mimura, J. T.....1401 S. Washington, Royal Oak
 Mitchell, B. M. (R)....Inverness Sylvan Village, Pontiac
 Moloney, J. Clark.....414 Arlington, Birmingham
 Monroe, John D.....Oakland County Health Dept.,
 Pontiac
 Morton, Joseph A.....St. Joseph Hospital, Pontiac
 Mueller, Elmer J.....1775 E. Fourteen Mile, Birmingham
 Mumby, Clinton J.....Pontiac State Bank Bldg., Pontiac
 Munson, H. L.....404 Pontiac Trail, Walled Lake
 Nalepa, Eugene J.....880 Woodward Ave., Pontiac
 Naz, John F.....20 S. Main St., Clarkston
 Neafie, Charles A. (L).....Pontiac City Health Dept.,
 Pontiac
 Nessel, J. H.....3355 Barlyn Lane, Bloomfield Hills
 Newcomb, Arnold B.....P.O. Box 1036, Berkley
 Newman, Roy.....413 Woodward Ave., Rochester
 Nichamin, Samuel J.....25101 Coolidge, Oak Park
 Nickerson, Ivey Dean.....6245 Golfview Dr., Birmingham
 Nosanchuk, Joseph I.....1215 Pontiac State Bank Bldg.,
 Pontiac
 Olsen, Richard E.....St. Joseph Mercy Hospital, Pontiac
 Ormond, J. K. (L).....880 Woodward Ave., Pontiac
 Ott, Harold A.....3019 N. Woodward Ave., Royal Oak
 Palmer, Hayden D.....506 Riker Bldg., Pontiac
 Patrick, C. I.....4721 Dixie Hwy., Drayton Plains
 Pauli, Theodore H.....206 Riker Bldg., Pontiac
 Payton, Charles F.....1719 Crooks Rd., Royal Oak
 Pear, E. G.....3023 N. Woodward Ave., Royal Oak
 Pearce, James F.....114 S. Washington, Royal Oak
 Peeke, Edwin S.....1569 Union Lake Rd., Pontiac
 Pelletier, Charles J.....1914 Vinsetta Boulevard,
 Royal Oak
 Petroff, George N.....1301 Pontiac State Bank Bldg.,
 Pontiac
 Pierce, W. H.....600 N. Woodward Ave., Birmingham
 Porritt, Ross J.....304 Riker Bldg., Pontiac
 Ports, Preston W.....33108 Grand River Ave., Farmington
 Prather, F. W.....347 N. Main St., Milford
 Prevette, Isaac C.....215 First National Bank Bldg.,
 Pontiac
 Quarton, Albert E., Jr.....3027 N. Woodward,
 Royal Oak
 Quinn, James R., Jr.....28 N. Saginaw St., Pontiac
 Raynale, George P. (L).....302 Wabek Bldg.,
 Birmingham
 Read, James Allen.....610 N. Woodward, Birmingham
 Rech, W. R.....404 Pontiac Trail, Walled Lake
 Reid, F. T.....49 W. 14 Mile Rd., Clawson
 Reye, G. A.....Pontiac State Hospital, Pontiac
 Riggs, Harry L.....31 Orchard Lake, Pontiac
 Riker, Aaron D.....1012 Riker Bldg., Pontiac
 Roehm, Harold R.....322 Wabek Bldg., Birmingham
 Rowley, Laurie G.....4400 Dixie Hwy., Drayton Plains
 Rupp, Edson C., Jr.....Washington Square Bldg.,
 Royal Oak
 Rush, Alva D., Jr.....114 S. Woodward Ave., Birmingham
 Russell, V. P.....624 Washington Square Bldg., Royal Oak
 Rutzky, Julius.....St. Joseph's Mercy Hosp., Pontiac
 Ruva, J. J.....4463 Dixie Hwy., Drayton Plains
 St. John, Harold A.....718 Riker Bldg., Pontiac
 Sanford, Glenn.....1775 E. 14 Mile Rd., Birmingham
 Sansone, T. J.....413 Woodward Ave., Rochester
 Satersmoen, Theodore.....Pontiac State Hospital, Pontiac
 Saunders, Kenneth.....211 S. Saginaw, Holly
 Schlechte, I. Carl.....120 Second St., Rochester
 Schlechte, Eve M.....120 Second, Rochester
 Schmitt, P. E.....Washington Square Bldg., Royal Oak
 Scholes, D. R.....277 Pierce, Birmingham
 Schuneman, Howard.....23760 Woodward, Pleasant Ridge
 Seaborn, A. J.....1412 S. Washington St., Royal Oak
 Segula, Robert L.....326 Riker Bldg., Pontiac
 Selman, J. H.....3306 Auburn Ave., Auburn Heights
 Sempere, C. R.....326 Riker Bldg., Pontiac
 Sewell, G. R.....411 W. Ten Mile Rd., Pleasant Ridge
 Shadley, Maxwell L.....94 Ottawa Dr., Pontiac
 Sheffield, Loren C.....420 Riker Bldg., Pontiac
 Sheridan, F. Michael.....1307 S. Washington
 Huntington Wood
 Simpson, E. K. (L).....804 Pontiac State Bank, Pontiac
 Smith, Carleton A.....Guilford Rd., Bloomfield Hill
 Smith, Donald S.....824 Riker Bldg., Pontiac
 Smith, George E.....629 Washington Square Bldg.,
 Royal Oak

Somers, Donald C.....2338 N. Woodward Ave., Royal Oak
Somerville, W. J.....25101 Cooleedge, Oak Park 37
Sosin, Allen.....23603 Farmington Rd., Farmington
Spencer, Lloyd H.....1219 S. Washington, Royal Oak
Spoehr, Eugene L.....22832 Woodward, Ferndale
Spohn, Earl W.....201 S. Center St., Royal Oak
Stageman, J. C.....1203 Pontiac State Bank Bldg., Pontiac
Stahl, H. F.....850 Lapeer Rd., Oxford
Stanley, W. F.....1148 S. Woodward, Royal Oak
Starker, C. T. (L).....80 East Iroquois Rd., Pontiac
Steffes, Everette M.....3345 Coolidge Hwy., Berkley
Stein, Edward.....25622 Coolidge Hwy.,
Huntington Woods
Steinberg, Norman N.....211 Washington Square Bldg.,
Royal Oak
Stolpman, A. K.....640 N. Woodward Ave., Birmingham
Stone, Sanford.....26630 W. Six Mile Rd., Detroit 19
Stratton, D. P.....Wm. Beaumont Hospital, Royal Oak
Stuecheli, Milton B.....Beaumont Hospital, Royal Oak
Sutton, Palmer E.....629 Washington Square Bldg.,
Royal Oak
Swickle, Edward F.....17 S. Main, Clawson
Tauber, Abraham.....1108 Peoples State Bank Bldg.,
Pontiac
Tinkey, L. L.....1809 S. Main St., Pleasant Ridge
VandenBerg, Kenneth.....538 Riker Bldg., Pontiac
Van Zoeren, J. J.....c/o the Haven Sanitarium, Rochester
Virga, George M.....715 N. Main St., Royal Oak

Wagner, Ruth E.....201 First St., Royal Oak
Wake, Douglas L.....1307 S. Washington, Royal Oak
Wagner, W. F.....1401 S. Washington, Royal Oak
Ward, W. Paul.....208 Wabeek Bldg., Birmingham
Watson, Thomas Y.....640 N. Woodward Ave.,
Birmingham
Weaver, Arthur.....538 Riker Bldg., Pontiac
Webber, Lynn T.....7350 Cooley Lake Rd., Pontiac
Wegrzyn, G. C.....St. Joseph Hospital, Pontiac
Weisberg, W. W.....24040 Condon, Oak Park
Wessels, Robert R.....302 Wabeek Bldg., Birmingham
Westfall, E. J.....230 Washington Square Bldg.,
Royal Oak
Westmaas, W. J.....1250 Villa, Birmingham
White, Robert H.....379 Hamilton, Birmingham
Wigent, Ralph D.....809 Pontiac State Bank Bldg.,
Pontiac
Williams, John P.....1102 Peoples State Bldg., Pontiac
Willis, Lorraine E. Awes....1411 Pontiac State Bank Bldg.,
Pontiac
Willis, Maurice E.....1411 Pontiac State Bank Bldg.,
Pontiac
Ylvisaker, J. R.....880 Woodward Ave., Pontiac
Young, Arthur R.....906 Riker Bldg., Pontiac
Zackheim, Herschel S.....114 S. Lafayette, Royal Oak
Zimmerman, Walter J.....258 Washington Square Bldg.,
Royal Oak
Zujko, Alphonse J.....1402 Pontiac State Bank Bldg.,
Pontiac

OCEANA COUNTY

Davis, L. J.....315 State St., Hart
Diehl, ClarenceShelby
Flint, Charles H. (A)....718 Fifth St., 401 Hilside Apt.,
Rochester, Minnesota
Hasty, Willis A.....405 State St., Shelby
Mullen, W. R.....Pentwater

Munger, L. P. (L).....Hart
Reetz, Fred A. (A).....Shelby
Robinson, Wm. G.....219 State St., Hart
Vrbanac, John J.....22 N. State St., Hart
Wood, Merle G.....19 Courtland St., Hart

ONTONAGON COUNTY

Archibald, D. H.....White Pine
Bender, Jesse L. (L).....Mass
Hogue, H. B.....Ewen

Lahti, Carl R.....800 Zinc St., Ontonagon
Strong, William F.....800 Chippewa, Ontonagon

OTTAWA COUNTY

Arendshorst, Wm.....121 W. 24th St., Holland
Bazuin, C. H.....313 N. River Ave., Holland
Beernink, E. H.....408 Fulton St., Grand Haven
Bloemendaal, D. C.....47 E. Main St., Zeeland
Bloemendal, W. B.....300 Franklin St., Grand Haven
Boersma, Vernon L.....121 W. 24th St., Holland
Bonzelaar, Alvin.....788 Columbia, Holland
Boone, Corneilius E.....101½ E. Main St., Zeeland
Bulthuis, Jerry E.....Jamestown
Clark, Nelson H.....17 W. Tenth Holland
Cook, C. S.....121 W. 24th, Holland
DeVries, H. G.....30 E. Ninth Holland
DeVries, Peter J.....214 Washington, Grand Haven
DeYoung, F. W.....205 W. Savidge St., Spring Lake
Frieswyk, Melvin J.....241 E. Main, Zeeland
Groat, F. L.....631 Franklin St., Grand Haven
Hager, RalphHudsonville
Hamelink, M. H.....196 W. 32nd St., Holland
Harms, H. P.....17 West 10th St., Holland
Heard, William.....414 Franklin St., Grand Haven
Kearney, Joseph B.....121 W. 24th St., Holland
Kemme, Gerrit J.....R. #3, Zeeland
Kitchel, John H.....414 Franklin St., Grand Haven
Kitchel, Mary S.....414 Franklin St., Grand Haven
Kools, William C.....14 W. 8th St., Holland
Kuipers, S. W.....431 Washington St., Holland
Long, C. E. (L).....222 Franklin St., Grand Haven

McArthur, Peter.....414 Franklin St., Grand Haven
Moerdyk, William G.....452 Washington Square, Holland
Nykamp, Russell R.....Zeeland
Post, J. J.....Allendale
Rottschaefer, William.....17 W. Tenth St., Holland
Rypkema, W. M.....228½ Washington St., Grand Haven
Schaftenaar, R. H.....17 West 10th St., Holland
Smit, G. J.....121 W. 24th St., Holland
Stobbelaar, Robert H.....107 S. Second, Grand Haven
Ten Have, Ralph.....1016 Sheldon, Grand Haven
Ton Pas, Henry.....Hamilton
Timmerman, E. C.....Coopersville
Van Appledorn, C. J.....99 West 23rd St., Holland
VanDerBerg, E. E.....17 West Tenth St., Holland
van der Velde, Otto.....35 W. 8th St., Holland
VandeWaa, Alfred J.....200 E. Main St., Zeeland
Van Kolken, P. J.....509 Franklin St., Grand Haven
VerDuin, J. W.....223 Washington, Grand Haven
Wells, K. N.....119 W. Savidge St., Spring Lake
Westrate, Warren K.....17 West Tenth St., Holland
Westrate, William.....17 West Tenth St., Holland
Westrate, William, Jr.....17 West Tenth St., Holland
Winter, John K.....10 E. 10th St., Holland
Winter, W. G. Jr.....10 East Tenth St., Holland
Yff, J. H.....511 E. Central Ave., Zeeland
Yonkman, Frederick F.....58 Pomery Road, Madison,
New Jersey

SAGINAW COUNTY

Ackerman, G. L.....	124 S. Jefferson Ave.,	Saginaw
Albers, M. J.....	218 Ardswsi,	Saginaw
Anderson, William K.....	404 S. Warren Ave.,	Saginaw
App, R. G.....	520 W. Genesee Ave.,	Saginaw
Bagley, Ulysses S. (R).....	1401½ N. Sixth St.,	Saginaw
Bass, V. V.....	826 N. Michigan Ave.,	Saginaw
Berberovich, Thomas F.....	2005½ N. Michigan Ave.,	Saginaw
Bishop, H. M.....	515 S. Jefferson,	Saginaw
Brender, Fred P.....	Frankenmuth	
Brock, W. H. (L).....	9 Merrill Bldg.,	Saginaw
Bruggers, Lawrence.....	1703 N. Michigan Ave.,	Saginaw
Bucklin, Robert V.....	1447 N. Harrison,	Saginaw
Bullington, Bert M.....	2000 Court St.,	Saginaw
Busch, F. J.....	1731 N. Michigan,	Saginaw
Butler, Milton G.....	502 S. Jefferson,	Saginaw
Cady, D. J.....	405 Thompson,	Saginaw
Cady, Frederick J.....	402 S. Jefferson Ave.,	Saginaw
Cady, F. J. Jr.....	402 S. Jefferson St.,	Saginaw
Cameron, A. K.....	409 First Savings & Loan Bldg.,	Saginaw
Cameron, H. A.....	1447 N. Harrison	Saginaw
Campbell, Lloyd A. (R).....	335 Brockway Place,	Saginaw
Caumartin, Hugh T. 1537 S. Washington Ave.,	Saginaw	
Chisena, Peter R.....	6227 Dixie Highway, Bridgeport	
Choate, Frances S.....	1213 N. Michigan Ave.,	Saginaw
Claytor, Archer A.....	1000½ N. Third Ave.,	Saginaw
Comer, Walter H. (M).....	29 Miami Road, Norristown	
Cortopassi, Andre J.....	324 S. Washington,	Saginaw
Cortopassi, Vital E.....	324 S. Washington Ave.,	Saginaw
Cory, Charles W.....	1227 N. Michigan,	Saginaw
Curts, James H.....	127 S. Washington,	Saginaw
Davenport, C. P.....	703 W. Genesee,	Saginaw
DeYoung, W. A.....	830 S. Jefferson,	Saginaw
Durman, Donald C.....	408 S. Jefferson Ave.,	Saginaw
Ely, Cecil W.....	1820 Janes St.,	Saginaw
Ernst, A. R. (R).....	4004 Woodland Dr., Falls	Virginia
Farley, A. W. Jr.....	1803 N. Michigan Ave.,	Saginaw
Feeheley, R. D.....	420 N. Michigan Ave.,	Saginaw
Fleschner, T. E.....	7450 W. Birch Run Road, Birch Run	
Friedrick, D. F. (A).....	4620 Monroe Blvd., Dearborn	
Gage, D. P.....	2002 Court St.,	Saginaw
Galsterer, Edwin C.....	124 S. Jefferson Ave.,	Saginaw
Gamon, A. E. II.....	2004 Court St.,	Saginaw
Gardner, J. H.....	815 N. Michigan Ave.,	Saginaw
Gerard, Roy J.....	1500 Gratiot Ave.,	Saginaw
Gilmore, R. D.....	234 W. Saginaw, Merrill	
Goldner R. D.....	2414 Wesley Dr.,	Saginaw
Gomon, Louis D.....	308 Eddy Bldg.,	Saginaw
Goodsell, J. O.....	408 S. Jefferson,	Saginaw
Grigg, Arthur P.....	320 N. Michigan Ave.,	Saginaw
Hand, Eugene A.....	211 Bearinger Bldg.,	Saginaw
Harvie, L. C.....	405 Wiechmann Bldg.,	Saginaw
Heavenrich, Robert M.....	1107 Gratiot Ave.,	Saginaw
Helmkamp, Herbert O.....	333 S. Jefferson,	Saginaw
Hester, Eustace G.....	2031 N. Michigan Ave.,	Saginaw
Hill, Victor L.....	514 First Savings & Loan Bldg.,	Saginaw
Howell, D. M.....	506 Wiechmann Bldg.,	Saginaw
Hyslop, W. T.....	1469 N. Harrison,	Saginaw
Jaenichen, Robert F. T.....	530 Hayden,	Saginaw
James, J. W.....	1021 W. Genesee,	Saginaw
Jarvi, R. M.....	1107 Gratiot Ave.,	Saginaw
Jiroch, Ralph S. (L).....	202 Wiechmann Bldg.,	Saginaw
Johnstone, K. T.....	Sag. Mall. Iron Central Fdry.,	
	63 Florence Ave.,	Saginaw
Jordan, Leo A.....	1524 E. Genesee,	Saginaw
Kerr, William B.....	300 S. Michigan,	Saginaw
Keyes, J. T.....	10222 Maple Road, Birch Run	
Kickham, Edward F.....	309 S. Jefferson Ave.,	Saginaw
Kleekamp, Herbert G.....	1005 Gratiot Ave.,	Saginaw
Kleinschmidt, E. E.....	3625 Webber St.,	Saginaw
Kolesar, R. C.....	1005 Gratiot St.,	Saginaw
Kowals, Francis V.....	1280 Glendale	Saginaw
Kramer, C. G.....	1721 Brenner St.,	Saginaw
Kretschmer, Thomas V.....	308 Wiechmann Bldg.,	Saginaw
Lassignal, J. C.....	2125 Bay St.,	Saginaw
Ling, Ernest M. (R).....	Spring Lake	
Ling, Kenneth C.....	Box 135, Hemlock	
Lohr, Oliver W.....	537 Millard St.,	Saginaw
Lohr, T. O.....	1135 N. Michigan Ave.,	Saginaw
Love, Neil W.....	505 Tuscola, Frankenmuth	
Luger, Frederick E.....	303 N. Jefferson,	Saginaw
Lurie, Robert I.....	2525 S. Washington,	Saginaw
Lyle, R. C.....	3821 State St., Bridgeport	
Mackinnon, E. D.....	1616 Court St.,	Saginaw
Mahaney, T. P.....	3521 State St.,	Saginaw
Manning, John E.....	815 N. Michigan,	Saginaw
Manning, J. W., III.....	515 S. Jefferson,	Saginaw
Markey, Francis L.....	808 N. Michigan,	Saginaw
Markey, Joseph P.....	808 N. Michigan,	Saginaw
Martzowka, William P.....	415½ W. Genesee,	Saginaw
Mason, W. G.....	1107 Gratiot,	Saginaw
Matthews, Harry C.....	1227 N. Michigan,	Saginaw
Maurer, John A. (R).....	20 Hammond Road	Saginaw
Mayne, Harold E.....	305 Graebner Bldg.,	Saginaw
McEwen, W. G.....	305 Graebner Bldg.,	Saginaw
McKinney, Alexander R. (L).....	330 S. Washington,	Saginaw
Meadows, J. M., Jr.....	1839 N. Michigan,	Saginaw
Meyer, H. J. (L).....	Box 241, Bridgeport	
Miller, G. F.....	404 S. Warren Ave.,	Saginaw
Moon, A. R.....	305 Second Nat'l Bldg.,	Saginaw
Morgrette, Leonard J.....	603 S. Jefferson,	Saginaw
Mudd, R. D.....	Med. Dir., Chevrolet Grey Iron Fdt.	
	1629 N. Washington St.,	Saginaw
Murphy, Albert P.....	303 N. Michigan Ave.,	Saginaw
Murray, Charles R.....	1827 N. Michigan Ave.,	Saginaw
Murray, Morris J.....	603 S. Jefferson,	Saginaw
Naglins, Jakabs.....	Chev. Grey Iron Foundry,	Saginaw
Nelson, Oscar A.....	120 N. Michigan,	Saginaw
Northway, R. O.....	505 First Savings & Loan,	Saginaw
Novy, Frank O.....	420 S. Jefferson,	Saginaw
Olson, Carl Porter.....	405 First Savings & Loan Bldg.,	Saginaw
Ostrander, Frank W. (L).....	Freeland	
Phillips, H. A.....	419 First Savings & Loan Bldg.,	Saginaw
Pickett, W. H. (R).....	216 S.W. Second St.,	Gainesville, Fla.
Pietz, Frederick.....	221 N. Michigan Ave.,	Saginaw
Potvin, Clifford D.....	2031 N. Michigan Ave.,	Saginaw
Powers, Robert F.....	529 W. Genesee St.,	Saginaw
Prather P. E.....	1227 N. Michigan Ave.,	Saginaw
Prinsell, G. G. (M).....	Ridgmount Prival Hotel, 65 Gower	
	St., London, W.C. 1, England	
Prior, R. W. (M).....	125 Waverly, Highland Park 3	
Richards, Ned W.....	3518 State St.,	Saginaw
Richter, Harry J.....	604 Second National Bank Bldg.,	Saginaw
Roggen, Ivan J.....	1227 N. Michigan Ave.,	Saginaw
Ruskin, D. B.....	321 Graebner Bldg., 120 N. Mich. Ave.,	Saginaw
Ryan, Richard S.....	633 S. Washington Ave.,	Saginaw
Sample, John T. (L).....	Box 2254,	Saginaw
Sargent, Donald V.....	1703 N. Michigan Ave.,	Saginaw
Schaiberger, Elmer G.....	1520 N. Michigan Ave.,	Saginaw
Schneider, A. J. N.....	509 S. Jefferson Ave.,	Saginaw
Schultz, F. R.....	Chesaning	
Sharp, Martin C.....	1803 N. Michigan,	Saginaw
Shek, J. L.....	808 N. Michigan Ave.,	Saginaw
Sheldon, S. A.....	124 S. Jefferson,	Saginaw
Siler, Delbert E.....	2031 N. Michigan Avenue,	Saginaw
Skowronski, Casimer A.....	1401 E. Genesee,	Saginaw
Skowronski, Marian J.....	Saginaw County Hospital	Saginaw
Slack, Walter K.....	625 S. Jefferson Ave.,	Saginaw
Slade, H. G.....	520 W. Genesee Ave.,	Saginaw
Smith, John C.....	705 Cooper St.,	Saginaw
Stahly, E. H.....	Saginaw County Hospital,	Saginaw

Stander, A. C.....1411 Court St., Saginaw
 Stewart, George W.....1902 Janes, Saginaw
 Sulfridge, Hugh L., Jr.....512 N. Michigan Ave., Saginaw
 Thompson, A. B.....2144 Ottawa, Saginaw
 Tiedke, G. E.....120 N. Michigan Ave., Saginaw
 Toshach, Clarence E.....330 S. Jefferson Ave., Saginaw
 Vitu, R. L.....808 N. Michigan Ave., Saginaw
 Volk, V. K.....1501 N. Michigan Ave., Saginaw

Wallace, H. C., Lt. Col. (M)....US Mil. Mission, Imp.
 Iranian Gendar., APO, New York, New York
 Webb, W. L.....1502 Wadsworth, Saginaw
 Weiss, A. W.....3521 State St., Saginaw
 Westlund, Norman.....349 S. Weadock Ave., Saginaw
 Wright, Edwin M.....404 S. Warren Ave., Saginaw
 Yntema, Stuart.....331 S. Jefferson Ave., Saginaw

ST. CLAIR COUNTY

Bailey, R. S.....400 Michigan Bank Bldg., Port Huron
 Banting, Keaneth C.....403 Peoples Bank Bldg.,
 Port Huron
 Barss, Joseph A.....1209 Tenth St., Port Huron
 Battley, J. C. Sinclair.....940 Military Ave., Port Huron
 Beck, Frank K.....901 Lapeer, Port Huron
 Beer, Joseph F.....104 N. Riverside, St. Clair
 Borden, Charles L.....216 Sperry Bldg., Port Huron
 Bottomley, Thomas H., Jr.....1102 Sixth St., Port Huron
 Boughner, W. H.....325 Pleasant St., Algonac
 Bovee, M. E.....2208 Stone St., Port Huron
 Bowden, William S.....137 Water St., Marine City
 Brush, Howard O.....612 Peoples Bank Bldg., Port Huron
 Cantwell, John D.....612 Peoples Bank Bldg., Port Huron
 Carey, L. M. (R).....604 Oakwood Ave., New Smyrna
 Beach, Fla.
 Carney, F. V. (R).....1065 N. Riverside St., St. Clair
 Carrie, R. G.....1423 Michigan Ave., Algonac
 Cleland, W. D., Jr.....1209 Tenth St., Port Huron
 Clifford, Robert P.....506 S. Riverside, St. Clair
 Clyne, B. C.....103 N. Main St., Yale
 Coon, G. G. (M).....U. S. Medical Center, Springfield
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Stetson, J. B. (A).....507 S. Seventh St., Ann Arbor
Stewart, D. Y. (A).....University Hospital, Ann Arbor
Stratford, T. P. (A).....University Hospital, Ann Arbor
Stroia, L. N.....University Hospital, Ann Arbor
Struthers, J. N. P.....Box A, Ypsilanti
Sturgis, Cyrus C.....Simpson Memorial Institute
Ann Arbor
Swank, Helen S.....University Health Service, Ann Arbor
Sweet, Robert B.....University Hospital, Ann Arbor
Tanay, Emanuel (A).....Ypsilanti State Hospital, Ypsilanti

Taylor, William B.....St. Joseph's Mercy Hospital,
Ann Arbor
Teed, Reed W.....215A S. Main, Ann Arbor
Theobald, R. W. (A).....2838 Pittsfield Blvd., Ann Arbor
Thieme, E. Thurston.....St. Joseph's Mercy Hospital,
Ann Arbor
Thompson, G. R. (A).....1400 Traver St., Ann Arbor
Timmons, R. L. (A).....1207 Prescott, Ann Arbor
Tisserand, J. B., Jr. (A).....2827 Pittsfield Blvd.,
Ann Arbor
Towsley, Harry A.....University Hospital, Ann Arbor
Tupper, C. J.....2657 Whitewood St., Ann Arbor
Tytus, J. S. (A).....805 Heatherway, Ann Arbor
Van Duzen, V. L.....Box A, Ypsilanti
Van Reesema, F. S. (A).....St. Joseph's Mery Hosp.,
Ann Arbor
Venrose, R. J.....143 W. Main St., Milan
von Ahn, Harold (A).....408 Thompson St., Ann Arbor
Votaw, C. L.....715 Lawrence St., Ann Arbor
Vreede, P. D. (M).....Naval Dispensary, Navy Dept.,
Washington, D.C.
Waggoner, Raymond W.....University Hospital,
Ann Arbor
Waid, Margaret E.....2900 Fuller Rd., Ann Arbor
Waldron, Alexander M.....309 N. Ingalls, Ann Arbor
Washburne, Charles L. (L).....St. Joseph's Mercy Hospital,
Ann Arbor
Watson, Ernest H.....280 Barton Dr., Ann Arbor
Weisman, R. L.....1408 Wells, Ann Arbor
Weller, J. M.....1621 South Blvd., Ann Arbor

Wenner, William (A).....University Hospital, Ann Arbor
Werley, J. D. (A).....818 Barton Dr., Ann Arbor
Westcott, George W.....511 W. Michigan, Ypsilanti
Westerberg, Martha R.....University Hospital, Ann Arbor
Westover, Charles J.....982 W. Ann Arbor Trail, Plymouth
Wetterstroem, R. G.....501 W. Dunlap St., Northville
Wicht, Paul J.....1385 W. Michigan Ave., Ypsilanti
Wile, Udo J. (L).....511 First Nat'l Bank Bldg.,
Ann Arbor
Williams, D. K. (A).....University Hospital, Ann Arbor
Williams, G. H. (A).....509 W. Hoover, Ann Arbor
Williams, Howard R.....1950 Manchester Rd., Ann Arbor
Williamson, Frederick B.....319 W. Michigan, Ypsilanti
Willis, P. W., III (A).....University Hospital, Ann Arbor
Wilson, James L.....University Hospital, Ann Arbor
Wilson, W. S. (A).....524 Linden St., Ann Arbor
Winkler, J. M. (A).....2015 Crestland Dr., Ann Arbor
Wisdom, Inez R. (L).....705 N. University, Ann Arbor
Wolfman, E. F., Jr. (A).....827 Bruce St., Ann Arbor
Woo, Theresa T.....708 W. Huron St., Apt. 5,
Ann Arbor
Wood, J. A. (A).....1700 South Blvd., Ann Arbor
Woods, J. J.....19 N. Washington, Ypsilanti
Worth, Melissa H. C.....15 N. Adams St., Ypsilanti
Wright, Walter J. (L).....417 W. Cross St., Ypsilanti
Wylie, William C. (L).....Dexter
Wyman, J. S.....University Health Service, Ann Arbor
Yoder, O. R.....Ypsilanti State Hospital, Ypsilanti
Zerbi, Victor M.....315 N. Adams St., Ypsilanti

WAYNE COUNTY

Abbott, James A.....1012 Kales Bldg., Detroit 26
Aben, G. J.....285 Biddle Ave., Wyandotte
Abraham, J. P.....Henry Ford Hospital, Detroit 2
Abruzzo, Anthony M.....Wayne County Training School,
Northville
Adamian, Gerald D.....10 Peterboro, Detroit
Adams, James R.....14741 Michigan Ave., Dearborn
Adams, V. B.....15124 Kercheval, Grosse Pointe 30
Adelson, Seymour.....62 W. Kirby, Detroit 2
Adelson, Sidney L.....16221 Schoolcraft, Detroit
Adler, Philip.....17193 Greenlawn Ave., Detroit 21
Adler, Sidney.....755 Fisher Bldg., Detroit
Agnew, George H.....559 Fisher Bldg., Detroit
Agnone, E. J.....797 Trombley, Grosse Pointe Park
Agree, A. Alan.....2701 Holbrook, Detroit 12
Aiuto, James J.....660 Cadieux Rd., Grosse Pointe 30
Akroyd, Cecil.....16551 W. Warren, Detroit 28
Alban, Emil.....6586 Allen Rd., Allen Park
Albrecht, A. J.....722 Maccabees Bldg., Detroit 2
Alexander, Allen.....24251 W. McNichols, Detroit 19
Alexander, Eugene J.....Henry Ford Hospital, Detroit
Alexander, L. C.....Receiving Hospital, Detroit 26
Alford, E. S.....101 Main St., Belleville
Allen, John V.....1336 Southfield, Lincoln Park 25
Alles, Russell W.....17555 James Couzens Highway, Detroit
Allison, Herbert C.....80 Kercheval, Grosse Pointe Farms
Alper, Louis.....Jackson Memorial Hospital, Miami, Fla.
Alpern, Elliott B.....2840 W. 7 Mile Rd., Detroit
Alpiner, Sam.....2850 E. Seven Mile Rd., Detroit 34
Altman, Raphael.....1052 Maccabees Bldg., Detroit
Altshuler, Ira M.....512 Fox Theater Bldg., Detroit 1
Amos, Thomas G.....201 Curtis Bldg., Detroit
Anderson, C. P.....400 Woodward, Detroit 26
Anderson, James O.....633 David Whitney Bldg., Detroit
Anderson, Walter L.....5902 Jos Campau, Detroit
Anderson, Walter T.....923 David Whitney Bldg., Detroit
Andonian, Sonia.....5051 Arnestory, Encino, Calif.
Andries, George H.....951 Fisher Bldg., Detroit 2
Andries, Raymond C. (L).....964 Lakepointe,
Grosse Pointe 30
Annessa, Domenico M.....3536 Burns, Detroit
Anslow, Robert E.....10 Peterboro St., Detroit 1

Appelman, Howard B.....1165 David Whitney Bldg.,
Detroit
Archambault, Henry A. (A).....1076 Maccabees Bldg.,
Detroit
Archambault, R. F.....35550 Michigan Ave., Wayne
Arehart, Burke W.....17600 Harper Ave., Detroit
Arent, J. G.....12600½ Grand River Ave., Detroit
Arminski, Thomas C.....1066 Fisher Bldg., Detroit
Armstrong, Arthur G.....530 Fisher Bldg., Detroit
Armstrong, M. J.....15125 Grand River, Detroit
Arnkoﬀ, Morris.....569 Fisher Bldg., Detroit 2
Arnold, Effie E.....16520 Oakfield, Detroit
Aronstam, Noah E. (L).....654 Maccabees Bldg., Detroit
Arrington, Robyn J.....7811 Oakland, Detroit
Ascher, Meyer S.....942 Maccabees Bldg., Detroit
Ashe, Robert M.....6838 Park Ave., Allen Park
Ashe, Stilson R. (L).....8031 W. Vernor Highway, Detroit
Ashley, L. Byron.....215 Professional Bldg., Detroit
Asselin, D. R.....1208 David Whitney Bldg., Detroit
Asselin, Regis F.....11417 Whittier, Detroit
Athay, R. M. (R).....3919 John R St., Detroit 1
Atler, Lawrence.....681 W. Forest, Detroit
Auble, Max E.....2501 W. Grand Blvd., Detroit 8
August, Harry E.....1242 Maccabees Bldg., Detroit 2
Austin, Shirley M.....5224 St. Antoine, Detroit 2
Avrin, Ira.....10821 Puritan, Detroit
Axelrod, A. R.....17300 Schaefer Rd., Detroit 35
Axelrod, Mildred A.....13725 Eight Mile Rd., Detroit 35
Axelrod, Robert G.....13725 Eight Mile Rd., Detroit 35
Babcock, Lloyd K.....16420 Schoolcraft, Detroit
Babcock, Myra E.....7 Poplar Park, Pleasant Ridge
Babcock, Warren W.....868 Fisher Bldg., Detroit
Bach, Walter F.....5419 Livernois, Detroit 10
Bacher, B. J.....1015 Kales Bldg., Detroit 26
Bachman, Morris E.....569 Fisher Bldg., Detroit 2
Bacon, Vinton A.....4819 W. Fort St., Detroit 9
Bader, Benjamin H.....5210 Third Ave., Detroit 2
Baef, Michael A. (R).....15435 Stahelin, Detroit 23
Baer, George J.....707 David Whitney Bldg., Detroit 26
Baer, Raymond B.....7815 E. Jefferson, Detroit 14
Bagley, Harry E.....7541 Oakman Blvd., Dearborn
Bahra, R. J.....24621 Gardner, Oak Park

Bailey, Don A. (R).....3300 Woodstock Dr., Detroit 21
 Bailey, L. J.....620 Vinewood Ave., Birmingham
 Baima, Margaret A.....630 Maccabees Bldg., Detroit 2
 Baker, Clarence (L).....19182 Patton Ave., Detroit 19
 Baker, F. E.....8005 Dexter Blvd., Detroit 6
 Balaga, Frank T.....9701 Jos. Campau, Detroit 12
 Balberor, Harry.....275 W. Grand Blvd., Detroit 16
 Balcerski, Matthew A.....10 Peterboro, Detroit 1
 Ballard, C. S. (R).....370 Chalmers Ave., Detroit
 Ballard, Donald R.....22231 W. Outer Dr., Dearborn
 Balser, Charles W.....13931 Gratiot, Detroit 5
 Baltz, James I.....Henry Ford Hospital, Detroit 2
 Barak, Lewis R.....7448 W. 7 Mile Rd., Detroit 21
 Baran, A. W.....15841 W. Warren, Detroit
 Barbaglia, L. C.....16378 Harper, Detroit
 Barber, Radivoj.....504 S. Main St., Plymouth
 Barefield, A. S.....19974 Wisconsin, Detroit 21
 Barenholtz, Benjamin.....674 Maccabees Bldg., Detroit
 Barker, David H.....7220 Gratiot Ave., Detroit 13
 Barland, Oscar L. (A).....5131 Milford, Detroit 10
 Barnes, Donald J.....564 Fisher Bldg., Detroit 2
 Barnes, Van D.....VA Hospital, Ann Arbor
 Barnett, Edwin Dwight.....Columbia Univ., 600 W. 168th
 St., New York 32, N. Y.
 Barnett, Morton.....1527 David Stott Bldg., Detroit 26
 Barnett, Saul E.....744-6 Lathrop, Detroit 1
 Barone, C. G.....15231 W. Seven Mile Rd., Detroit 35
 Barrett, C. D.....1151 Taylor Ave., Detroit 2
 Barrett, Raymond J.....18280 Fairfield, Detroit 21
 Barrett, Wyman D.....311 David Whitney Bldg., Detroit 26
 Barron, James.....Henry Ford Hospital, Detroit
 Barron, William H.....14938 Livernois, Detroit
 Barton, D. D.....8071 Manor, Detroit 4
 Barton, Joseph R.....7503 W. Warren, Detroit 10
 Batchelor, Thomas M.....8060 Conant, Detroit 34
 Bates, G. S.....861 Monroe Blvd., Dearborn
 Battle, J. M.....23834 Michigan, Dearborn
 Bauer, A. Robert.....19268 Grand River, Detroit 23
 Bauer, Benedict J.....7615 Dexter Blvd., Detroit 6
 Bauer, Lester Eugene.....859 Fisher Bldg., Detroit
 Baugh, R. H.....24216 Michigan Ave., Dearborn
 Baumer, Moe.....701 Kales Bldg., Detroit
 Baumgarten, Elden C.....8045 E. Jefferson, Detroit
 Baumgarten, T. W.....8045 E. Jefferson, Detroit 14
 Bayles, John.....3416 Michigan, Detroit 16
 Beach, Watson.....20825 Mack Ave.,
 Grosse Pointe Woods 36
 Beam, A. Duane.....85 Kercheval, Detroit 30
 Beamer, G. D.....14853 Michigan Ave., Dearborn
 Beard, J. E.....906 N. Highland, Dearborn
 Beck, S. M., Jr.....2514 Biddle, Wyandotte
 Becker, Abraham.....1414 David Broderick Tower,
 Detroit 26
 Becker, Joseph W.....513 David Whitney Bldg.,
 Detroit 26
 Beckett, Peter G. S.....951 E. Lafayette, Detroit 7
 Beckett, Victoria L.....10410 E. Jefferson, Detroit 14
 Becklein, Clarence L.....14351 E. Warren Ave., Detroit 13
 Beckwith, Carl C.....2514 Edison Ave., Detroit 6
 Bedell, Archie A.....15545 Mack Ave., Detroit
 Bedwell, William.....752 Book Bldg., Detroit 26
 Beebe, Willard E.....13365 Michigan Ave., Dearborn
 Beeman, E. A.....2900 S. Fort St., Detroit 17
 Beewkes, L. E.....12922 W. Warren, Dearborn
 Behan, R. C.....2167 Guardian Bldg., Detroit 26
 Beigler, Sydney K.....513 David Whitney Bldg., Detroit
 Beitman, Max R.....510 Kales Bldg., Detroit 26
 Belanger, Ernest E.....10593 W. Jefferson, Detroit
 Belanger, W. G.....1041 Harvard Rd., Grosse Pointe 30
 Belden, D. F.....13339 Woodrow Wilson, Detroit 38
 Belisle, John A.....Wayne County Hospital, Eloise
 Bell, J. Kenner.....1654 First Nat'l Bank Bldg., Detroit 26
 Bende, Sandor.....15863 Garfield, Allen Park 10
 Beninson, Joseph.....Henry Ford Hospital, Detroit 2
 Bennett, Germany E.....5144 Hastings, Detroit 11
 Bennett, Harry B.....942 Maccabees Bldg., Detroit 2
 Bennett, H. Stanley.....1221 Lincoln, Lincoln Park

Bennett, Sanford A.....15301 West 9 Mile Rd.,
 Oak Park 37
 Bennett, Zina B.....2730 E. Jefferson, Detroit 26
 Bennis, E. L.....19630 W. McNichols Rd., Detroit 19
 Benson, Clifford D.....1515 David Whitney Bldg., Detroit
 Benson, Davis A.....3706 Sturtevant, Detroit 6
 Benson, P. J.....2355 Fort St., Lincoln Park 25
 Benson, Virginia M.....16238 Snowden Ave., Detroit 27
 Beresh, Louis.....18476 Prairie, Detroit 21
 Berge, Clarence A.....14309 E. Jefferson, Detroit 15
 Berger, Edwin L.....Guimaraes Clinic, 7301 Schaefer,
 Dearborn
 Bergman, Murray Stewart.....4400 Livernois, Detroit 10
 Bergman, Theodore I.....16455 Woodward, Detroit 3
 Bergo, Howard L.....19351 Meadowbrook, Northville
 Berk, J. E.....Sinai Hospital, Detroit
 Berke, Sydney S.....3333 E. Jefferson, Detroit
 Berkman, Ruth.....2206 David Broderick Tower,
 Detroit 26
 Berlien, Ivan C.....2906 E. Jefferson Ave., Apt. B-1,
 Detroit 7
 Berlin, Allen.....19467 Livernois, Detroit 21
 Berman, Lawrence.....1401 Rivard, Detroit 7
 Berman, Robert.....509 Francis Palms Bldg., Detroit 1
 Berman, Sidney.....1326 E. Seven Mile Rd., Detroit 3
 Berman, Sidney L.....60 W. Hancock, Detroit 1
 Bernard, Walter G.....910 Chalmers, Detroit 15
 Bernbaum, Bernard.....17320 Livernois, Detroit
 Bernstein, Albert E. (L).....2400 Boston Blvd., Detroit 6
 Bernstein, Samuel S.....18200 Wyoming, Detroit
 Berry, Joseph.....19242 W. Seven Mile Rd., Detroit 19
 Bezins, Erna.....20211 Greenfield, Detroit
 Besancon, J. H.....1510 Broderick Tower, Detroit
 Best, T. H. Edward.....9221 E. Jefferson, Detroit
 Bethea, J. H.....1307 Kales Bldg., Detroit 26
 Bialik, M. H.....14853 Michigan Ave., Dearborn
 Bicknell, Edgar A.....13641 Wyoming, Detroit 21
 Bicknell, Frank B.....938 David Whitney Bldg., Detroit
 Bielawski, J. G.....922 Maccabees Bldg., Detroit 2
 Bigman, Oscar.....Herman Kiefer Hospital, Detroit 2
 Billingslea, Thomas H.....2175 E. Willis, Detroit
 Birch, John R.....1010 Maccabees Bldg., Detroit 2
 Birkelo, C. C. (R).....812 Highland, Orlando, Fla.
 Birkham, Fred F.....7301 Schaefer, Dearborn
 Birkhill, F. R.....817 David Whitney Bldg., Detroit 26
 Birmingham, J. R.....14216 W. McNichols Rd., Detroit 35
 Birndorf, Leonard.....18004 John R., Detroit
 Bittker, Isadore Irving.....3321 Rochester Rd., Royal Oak
 Bittrich, Norbert M.....Providence Hospital, 2500 W. Gd.
 Blvd., Detroit 8
 Black, Perry S.....19431 Van Dyke, Detroit 12
 Blain, Alexander W. (L).....2201 E. Jefferson St.,
 Detroit 7
 Blain, Alexander W., III (M).....2201 E. Jefferson,
 Detroit
 Blain, D. G.....2201 E. Jefferson, Detroit 7
 Blain, James H., Jr.....119 Kercheval, Grosse Pointe
 Blaine, Max.....654 Maccabees Bldg., Detroit
 Blair, W. F.....81 E. Kirby, Detroit 1
 Blanchard, R. S.....8811 Hamilton, Detroit 2
 Bleier, Alfred.....13015 E. Warren Ave., Detroit 13
 Bleier, Joseph.....7504 Dexter Blvd., Detroit 6
 Bloch, Abraham.....2935 E. Milwaukee, Detroit 11
 Block, Duane.....Rouge Medical Dept., 3000 Schaefer Rd.,
 Dearborn
 Block, M. A.....Henry Ford Hospital, Detroit 2
 Blodgett, James B.....606 Kales Bldg., Detroit 26
 Blodgett, William E. (L).....602 Kales Bldg., Detroit 26
 Blodgett, William H.....603 Kales Bldg., Detroit
 Bloom, Albert.....6484 Chene St., Detroit 11
 Bloom, Arthur R.....1058 Maccabees Bldg., Detroit 2
 Blumenthal, Franz L.....466 Fisher Bldg., Detroit 2
 Blumer, Abraham.....25321 Five Mile Rd., Detroit 39
 Boccaccio, John L.....16383 Harper, Detroit 13
 Boccia, J. J.....15761 E. Warren, Detroit
 Boddie, Arthur W.....2737 Chene, Detroit 7
 Bogucki, Chester.....11455 E. McNichols Rd., Detroit 34

Bogue, Robert E.....15800 W. McNichols Rd., Detroit 35
 Bogusz, Ladislaus (R).....29215 Maranya Rd.,
 Leisure City, Homestead, Fla.
 Bohn, Z. Stephen.....327 Professional Bldg., Detroit
 Bohne, A. W.....Henry Ford Hospital, Detroit
 Boland, J. R. (R).....P.O. Box 50, Grand Marais
 Bollet, A. J.....1401 Rivard, Detroit 7
 Bolstad, Donald S.....Henry Ford Hospital, Detroit 2
 Bolter, Sidney.....15228 W. Seven Mile Rd., Detroit 35
 Bolton, Russell P., Jr.....19566 Grand River, Detroit
 Boog, Janet M.....Medical Concourse, Northland Center,
 Detroit 35
 Bookstein, Abraham M.....1475 Colton, Detroit 3
 Borchak, Robert (A).....1905 Rowland, Royal Oak
 Borin, Maurice C.....4274 N. Woodward, Royal Oak
 Bornstein, Sidney.....2033 Puritan, Detroit 3
 Bott, Edmund T.....1629 Ford, Wyandotte
 Botvinick, Isadore.....13701 W. 7 Mile Rd., Detroit 21
 Boutrous, T. A.....15801 W. McNichols Rd., Detroit 25
 Bovill, E. G.....17555 James Couzens Highway,
 Detroit 35
 Bower, Donald W.....1336 Southfield, Lincoln Park
 Bower, F. T.....Chassis Parts Div., Ford Motor Co.,
 P.O. Box 331, Detroit 32
 Bowers, Leo J.....11200 E. McNichols Rd., Detroit 34
 Boyajian, Albert.....10048 Lauder, Detroit 27
 Boyd, E. J.....Receiving Hospital, Detroit 26
 Boyd, John H.....2615 W. Jefferson, Trenton
 Boyle, Albert J.....20825 Mack Ave., Detroit 30
 Boyle, R. E.....Fisher Body Div., GMC, Livonia
 Bracken, Andrew H.....13102 W. Warren Ave., Dearborn
 Braden, Robert G.....2929 Fort St., Wyandotte
 Bradfield, Horace F.....510 E. Warren, Detroit
 Bradley, George T.....1201 David Whitney Bldg.,
 Detroit 26
 Bradshaw, William H.....4715 St. Antoine, Detroit 1
 Brady, Herbert A.....208 Reno Bldg., River Rouge 18
 Braley, William N. (L).....12897 Woodward Ave.,
 Detroit 3
 Bramigk, F. W. (L).....509-11 Professional Bldg.,
 Detroit 1
 Brand, Benjamin.....4500 Wabash Ave., Detroit 8
 Braun, Lionel.....15121 West McNichols Rd., Detroit 35
 Braverman, Morris M.....1222 Maccabees Bldg., Detroit 2
 Brekke, Viola G.....250 Highland, Apt. 302,
 Highland Park 3
 Bremer, John P.....17818 E. Warren, Detroit 24
 Bremer, William M.....15641 E. Warren, Detroit 24
 Breneman, G. M.....Henry Ford Hospital, Detroit 2
 Brennan, M. J.....1176 Grayton, Grosse Pointe Park
 Brent, Morris S.....1330 Strathcona, Detroit 3
 Brey, Norman W.....1202 Maccabees Bldg., Detroit 2
 Briegel, W. A. (R).....1186 Buckingham Ave., Birmingham
 Briggs, William J.....1202 Maccabees Bldg., Detroit 2
 Brines, O. A.....1401 Rivard, Detroit
 Bringard, Elmer L.....16901 James Couzens, Detroit 35
 Brisson, Joseph C.....9191 Whittier, Detroit 24
 Bristol, William R.....6142 Bishop Rd., Detroit
 Broadman, Sylvan A.....16401 Grand River, Detroit 27
 Broderson, H. S.....10720 W. Jefferson, River Rouge
 Bromme, William.....10 Peterboro, Detroit 1
 Bronson, W. W.....22128 Grand River, Detroit 19
 Brooks, Charles W.....1605 Atkinson, Detroit
 Brooks, E. M.....3130 Guardian Bldg., Detroit 26
 Brooks, Nathan.....1001 Kales Bldg., Detroit
 Brosius, C. O.....41001 Seven Mile Rd., Northville
 Brosius, William L.....Harper Hospital, Detroit
 Broudo, P. H.....316 Professional Bldg., Detroit 1
 Brough, Glen A.....1402 David Whitney Bldg., Detroit
 Brown, A. G.....18230 Grand River, Detroit 23
 Brown, Audrey O.....742 Maccabees Bldg., Detroit
 Brown, Carlton F.....15800 W. McNichols Rd., Detroit 35
 Brown, Charles H.....2387 Fort St., Wyandotte
 Brown, E. M.....13123 La Salle, Huntington Woods
 Brown, Frances.....1940 Lincolnshire, Detroit
 Brown, Gordon T.....13000 Hayes Ave., Detroit 5

Brown, Henry S.....18101 James Couzens Highway,
 Detroit 2
 Brown, John F.....9065 Columbia, Detroit 39
 Brown, John R.....702 Maccabees Bldg., Detroit 2
 Brown, Robert A.....3529 Jefferson, Ecorse
 Brown, Samuel M.....16500 Wyoming Ave., Detroit 21
 Brown, Stanley H.....8544 W. McNichols Rd., Detroit 21
 Brown, Thomas A.....5430 W. Warren Ave., Detroit
 Brownell, Paul G.....18916 Woodward Ave., Detroit 3
 Bruder, R. C.....10149 Michigan Ave., Dearborn
 Bruehl, Richard A. (A).....4303 Yorkshire, Detroit
 Bruer, E. L.....12170 Fort St., Wyandotte
 Bruer, E. S.....12170 Fort St., Wyandotte
 Brundage, R. D.....1914 Edgewood, Dearborn
 Brunke, Bruno B. (L).....7765 Mack Ave., Detroit 14
 Brush, Brock Edwin.....2799 W. Grand Blvd., Detroit
 Bruton, M. F.....341 Massachusetts, Detroit
 Bryan, Donald I.....704 Medical Arts Bldg.,
 13700 Woodward Ave., Highland Park
 Bryan, J. B.....Henry Ford Hospital, Detroit 2
 Bryce, John D.....5400 Trumbull, Detroit 8
 Budd, Richard D.....Northville State Hosp., Northville
 Budson, Daniel.....10300 W. Seven Mile Rd., Detroit 21
 Buell, John H.....901 David Whitney Bldg., Detroit 26
 Buergi, Robin C.....Henry Ford Hospital, Detroit
 Buller, Harry L.....4120 Fennell Ave., Detroit 38
 Burke, Ralph M.....641 David Whitney Bldg., Detroit 26
 Burnham, David C.....13700 Woodward Ave.,
 Highland Park
 Burns, R. E.....Henry Ford Hospital, Detroit 2
 Burns, R. T.....11110 Morang, Detroit 24
 Burnside, H. B.....20403 Stratford, Detroit 21
 Burnstine, Julius Y.....45 Owen Ave., Detroit
 Burnstine, Perry P.....13600 Vassar Dr., Detroit 35
 Burr, George C.....1706 David Whitney Bldg., Detroit 26
 Burr, H. Leonard.....168 Fisher Rd., Grosse Pointe
 Burroughs, R. G.....1449 David Whitney Bldg., Detroit
 Burrows, Howard A.....10423 W. Warren, Dearborn
 Burstein, Harry S.....2950 W. Grand Blvd., Detroit 2
 Burstein, I. Marvin.....2950 W. Grand Blvd., Detroit 2
 Burstein, Morris M.....2950 W. Grand Blvd., Detroit 2
 Burton, D. T.....54 Arden Park, Detroit
 Burton, Irving F.....14624 East 7 Mile Rd., Detroit
 Bush, Glendon J.....18901 W. McNichols Rd., Detroit 19
 Butler, Harry J. (L).....33 Waverly, Highland Park 3
 Butler, H. R.....3529 W. Jefferson, Ecorse
 Butler, John D.....2173 W. Grand Blvd., Detroit 8
 Butler, J. Payne.....3403 W. Warren, Detroit 8
 Butler, Lawrence H.....14521 E. Seven Mile Rd., Detroit
 Butler, Volney N.....28 W. Adams, Detroit 26
 Buttrum, Edward J.....14755 Fennell, Detroit 27
 Byers, Dudley W.....8934 Oakland Ave., Detroit
 Cadieux, Henry W. (L).....103 E. Grand Blvd., Detroit 7
 Cadwell, Howard.....Wayne County Health Dept., Eloise
 Cahalan, Joseph L.....214 David Whitney Bldg., Detroit 26
 Cain, Waldo L.....8033 Twelfth St., Detroit 6
 Caldwell, J. R.....2799 W. Grand Blvd., Detroit 2
 Calkins, H. N.....15302 Gilchrist, Detroit
 Callaghan, Thomas T.....312 Professional Bldg., Detroit
 Cameron, A. H.....2853 Biddle, Wyandotte
 Cameron, D. A.....23401 Ford Rd., Dearborn
 Campbell, Charles A.....12922 West Warren, Dearborn
 Campbell, Duncan.....9203 Grand River, Detroit 4
 Campbell, Duncan A. (L).....1613 David Whitney Bldg.,
 Detroit 26
 Campbell, Kenneth N.....22932 Woodward, Detroit 20
 Campbell, Malcolm D.....10 Peterboro St., Detroit
 Campbell, Mary B.....660 Seward St., Detroit 2
 Campbell, Robert E.....8445 E. Jefferson, Detroit 14
 Campbell, Thelma M. Wygant.....22375 Garrison,
 Dearborn
 Candler, C. L.....20040 Mack Ave.,
 Grosse Pointe Woods 30
 Canter, Allie L.....13700 Woodward Ave., Detroit 5
 Canter, G. E.....13732 Woodward Ave., Detroit 3
 Cantor, Herbert C.....668 Maccabees Bldg., Detroit 2
 Cantor, Meyer O.....666 Maccabees Bldg., Detroit 2

Cantow, L. A.....829 Fisher Bldg., Detroit 2
 Capano, O. A.....16401 Grand River Ave., Detroit 27
 Capellari, Elmer.....310 E. Jefferson, Detroit 26
 Caputo, Joseph M.....22575 Nona Ave., Dearborn
 Caputo, Nancy.....18145 Mack, Detroit
 Capuzzi, Eugene T.....24644 Gleneyrie Dr., Birmingham
 Caraway, Jas. E.....35804 John R. St., Wayne
 Carbone, Louis A.....14711 Gratiot, Detroit 5
 Carlisle, J. C.....1221 Lincoln, Lincoln Park
 Carlisle, Joseph.....2605 W. Grand Blvd., Detroit 8
 Carlson, Harold W.....18070 Wildemere, Detroit 21
 Carmichael, Edward K.....7815 E. Jefferson, Detroit 14
 Carnes, H. E.....Parke, Davis & Co., Detroit 32
 Carp, Joseph.....8839 Mt. Elliott, Detroit 11
 Carpenter, C. J.....3835 Biddle St., Wayne
 Carpenter, Glenn B.....1416 David Whitney Bldg.,
 Detroit 26
 Carpenter, William S.....1317 David Whitney Bldg.,
 Detroit 26
 Carr, J. G.....14111 Korte, Detroit
 Carrick, Lee.....1515 Kales Bldg., Detroit 26
 Carroll, Elmer H.....9920 Stoepel Ave., Detroit 4
 Carroll, Lona B.....1066 Maccabees Bldg., Detroit 2
 Carson, Herman J.....7745 Puritan, Detroit 21
 Carstens, H. R.....83 Longhill St., Springfield 8, Mass.
 Carter, John M.....613 David Whitney Bldg., Detroit 26
 Carter, L. F.....613 David Whitney Bldg., Detroit 26
 Cassel, H. E.....6525 Park, Allen Park
 Cassidy, William J. (L).....1737 David Whitney Bldg.,
 Detroit 26
 Castle, M. E.....761 Fisher Bldg., Detroit 2
 Castrop, Charles W.....10149 Michigan Ave., Dearborn
 Catherwood, Albert E.....1337 David Whitney Bldg.,
 Detroit 26
 Caton, Dorothy F.....17144 Oak Dr., Detroit 21
 Caughey, A. F., Jr.....16889 James Couzens, Detroit 35
 Caughey, Edgar H.....11301 Whittier, Detroit 24
 Caumartin, F. E.....17184 Wildemere, Detroit 21
 Cellar, Frank A.....944 Maccabees Bldg., Detroit
 Ceravolo, Albert J.....Bon Secours Hosp., Grosse Pointe 30
 Ceresko, A. R.....18650 W. Warren Ave., Detroit 10
 Cetnar, E. J.....10492 Merlin, Detroit 24
 Chabut, V. George.....206 W. Dunlap, Northville
 Chalut, N. I.....212 David Whitney Bldg., Detroit 26
 Chalk, C. C.....14711 Gratiot Ave., Detroit 5
 Chall, Henry G.....2941 W. McNichols, Detroit 21
 Chapin, Sidney E.....10149 Michigan Ave., Dearborn
 Chapman, Aaron L.....2550 Atkinson, Detroit 6
 Chapman, Paul T.....1151 Taylor Ave., Detroit 2
 Chapman, Roland H.....7600 John R. St., Detroit 2
 Chapnick, H. A.....506 Kales Bldg., Detroit
 Charleston, R. A.....15174 Lasher Road, Detroit 23
 Charnas, Sidney.....542 Maccabees Bldg., Detroit 2
 Chase, C. H. (R).....8868 Hendrick Drive, Brighton
 Chason, Jacob L.....1401 Rivard St., Detroit 7
 Check, Frank E.....3439 Iroquois, Detroit 14
 Chesluk, Herman M.....17191 James Couzens Hwy.,
 Detroit
 Chester, Alice.....25085 Coolidge Hwy., Oak Park
 Chester, William P.....5057 Woodward, Detroit 2
 Childs, G. M.....2842 W. Grand Blvd., Detroit
 Chipman, Willard A.....14300 W. McNichols Road,
 Detroit 35
 Chostner, G. C. (R).....715 Delaney Park Drive,
 Orlando, Florida
 Chown, Marion.....2853 Biddle St., Wyandotte
 Christopher, James G.....Holy Cross Hospital,
 4777 East Outer Drive Detroit
 Chrouch, Laurence A.....18456 Grand River, Detroit 23
 Church, A. S.....19570 Bretton Dr., Detroit
 Cioffari, M. S.....19363 James Couzens Hwy., Detroit
 Ciprian, Joseph E.....1775 E. Grand Blvd., Detroit
 Clapper, Muir.....1401 Rivard St., Detroit 26
 Clark, Arthur M.....22400 Cherryhill, Dearborn
 Clark, C. J.....Ford Motor Company, Dearborn
 Clark, Clarence M.....2605 Holbrook, Detroit 12
 Clark, Harold E.....17198 Oak Dr., Detroit 21
 Clark, H. G. (R).....5455 Franklin Rd., Birmingham
 Clark, William P.....1682 S. Fort St., Lincoln Park
 Clarke, Charles N.....2501 West Grand Blvd., Detroit
 Clarke, Norman E.....2501 W. Grand Blvd., Detroit 8
 Clarke, N. E., Jr.....2051 W. Grand Blvd., Detroit 8
 Clarke, Robert B.....1112 Kales Bldg., Detroit
 Clifford, C. H.....10 Peterboro, Detroit 1
 Clifford, G. O.....Wayne Univ. College of Med., Detroit
 Clifford, John Edward.....910 David Broderick Tower,
 Detroit 26
 Clifford, R. H.....Henry Ford Hospital, Detroit
 Clifford, Thomas P.....1802 David Whitney Bldg.,
 Detroit 26
 Clippert, J. C. (L).....Hotel Fort Shelby, Detroit
 Coan, Glenn L.....2336 Van Alstyne Blvd., Wyandotte
 Coates, E. O., Jr.....Henry Ford Hospital, Detroit 2
 Cobane, John H.....10 Peterboro, Detroit 1
 Cochrane, Edgar G.....12805 Hamilton, Detroit 3
 Cocorelis, S. G.....610 Kales Bldg., Detroit 26
 Cohen, H. Herbert.....12700 W. 7 Mile Road, Detroit 21
 Cohen, Lewis.....7441 W. Seven Mile Rd., Detroit 21
 Cohen, M. F.....20242 Braile, Detroit 19
 Cohn, Daniel E.....409 Fox Bldg., Detroit 1
 Cohoe, Don A.....18916 Woodward, Detroit 3
 Cole, F. H. (L).....1757 David Whitney Bldg., Detroit 26
 Cole, James E.....344 Glendale, Detroit 4
 Cole, Wyman C. C.....1077 Fisher Bldg., Detroit 2
 Cole, Wyman C. C., Jr.....3001 West Grand Blvd.,
 Detroit 2
 Coleman, Margaret W.....58 W. Adams, Detroit 26
 Coleman, P. F.....30935 Plymouth Road, Livonia
 Coleman, William G.....20526 Grand River, Redford 19
 Collings, M. R.....9201 W. Outer Dr., Detroit 19
 Collins, James E.....12845 Broadstreet, Detroit 4
 Collins, J. W.....15870 Twelfth St., Detroit 38
 Colville, J. M.....Henry Ford Hospital, Detroit 2
 Colvin, Leslie T.....474 Fisher Bldg., Detroit 2
 Colyer, Raymond G.....56 Rhode Island, Detroit 3
 Comfort, Milton D.....28754 Seneca, Flat Rock
 Constock, Lawrence A.....P. O. Drawer L, Trenton
 Condon, S. E.....1477 Lochmoor Blvd.,
 Grosse Pointe Woods 36
 Conklin, Emma J.....Wayne County General Hosp., Eloise
 Conley, L. C. M.....99 Tuxedo, Detroit 3
 Connelly, Richard C.....1645 David Whitney Bldg.,
 Detroit 26
 Connolly, Frank.....13815 Puritan, Detroit 27
 Connolly, John P. (A).....13815 Puritan, Detroit 27
 Connolly, P. J.....1317 David Whitney Bldg., Detroit 26
 Connors, J. J.....3546 Trumbull, Detroit
 Cook, James A.....2246 Twentieth St., Wyandotte
 Cook, James C.....5 Fairmount Ct., Dearborn
 Cooksey, Warren B.....62 W. Kirby, Detroit
 Cooper, Edmond L.....414 David Whitney Bldg., Detroit
 Cooper, James B.....18145 Mack Ave., Detroit 24
 Cooper, Ralph Ruehl.....1515 David Whitney Bldg.,
 Detroit 26
 Cooper, R. F.....817 David Whitney Bldg., Detroit 26
 Corbeille, Catherine.....1050 Fisher Bldg., Detroit
 Cortez, J. A.....16401 Grand River, Detroit 27
 Costello, Russell T.....630 Fisher Bldg., Detroit 2
 Costello, S. D.....2900 S. Fort St., Detroit 17
 Cotant, John F.....8935 Fenkell, Detroit 21
 Cotruro, Louis D.....3640 McDougall, Detroit 7
 Cotton, Schuyler O.....2332 Carson Ave., Detroit 9
 Coulter, William J.....5258 Chatsworth, Detroit 24
 Courtney, R. S.....Wayne County General Hosp., Eloise
 Courville, Charles J.....1202 Maccabees Bldg., Detroit 6
 Cowan, Wilfred.....14239 Chandler Park Dr., Detroit 13
 Cowen, Leon B.....1038 Maccabees Bldg., Detroit 2
 Cowen, Robert L.....907 Mutual Bldg., Detroit 26
 Coyle, J. E.....573 Fisher Bldg., Detroit
 Craig, R. E.....20323 Mack Ave., Grosse Pointe Woods
 Crawford, E. W.....3919 John R. St., Detroit 1
 Crews, Thomas H.....772 Fisher Bldg., Detroit 2
 Crockett, Ethelene J.....7263 American, Detroit 10

Croll, Leo J.....1326 Maccabees Bldg., Detroit 2
 Croll, Maurice M.....1326 Maccabees Bldg., Detroit 2
 Crook, Charles L.....13700 Woodward, Detroit 3
 Cross, Harold E.....68 N. Deeplands Rd., Grosse Pointe
 Crossen, Robert J.....902 David Whitney Bldg., Detroit 26
 Croushore, James E.....573 Fisher Bldg., Detroit 2
 Cruikshank, Alexander (L).....228 E. Grand Blvd.,
 Detroit 7
 Cubberley, R. B.....1800 Tuxedo, Detroit 6
 Curhan, Jos. Howard.....18709 Meyer Road, Detroit 21
 Curtis, Frank E.....10 Peterboro, Detroit 1
 Curtiss, William P.....3181 E. Jefferson, Detroit 9
 Cushing, Russell G.....13424 Gratiot Ave., Detroit 5
 Cusick, Paul L.....1108 Stroh Bldg., Detroit 26
 Cuykendall, J. H.....VA Hospital, Dearborn
 Czuj, J. M.....17555 James Couzens, Detroit 35
 Dale, Edward C.....28 W. Adams Ave., Detroit 26
 Dale, Esther H.....1401 Rivard St., Detroit 26
 Dale, Mark.....3340 E. Eight Mile Road, Detroit 34
 Daly, E. T.....21714 Fenkell, Detroit 23
 Danforth, James C., Sr., (R).....20175 Mack Ave.,
 Grosse Pointe Woods
 Danforth James C., Jr.....20175 Mack Ave.,
 Grosse Pointe Woods
 Danforth, Mortimer E. (L).....1311 Cadillac Blvd.,
 Detroit 14
 Danforth, Robert.....20175 Mack Ave., Detroit 36
 Darling, Charles E.....673 Fisher Bldg., Detroit
 Darling, Milton A.....673 Fisher Bldg., Detroit 4
 Darnley, J. D.....Henry Ford Hospital, Detroit 2
 Darpin, Peter H. (L).....6602 W. Fort St., Detroit 9
 Davidson, David M.....1055 Fisher Bldg., Detroit 2
 Davidson, Harold.....17111 Indiana Ave., Detroit 21
 Davidson, Harry O.....Henry Ford Hospital, Detroit
 Davies, T. S. (L).....5425 Kercheval, Grosse Pointe
 Davies, Windsor S.....1302 Stroh Bldg., Detroit 26
 Davis, H. A.....15565 Champagne, Allen Park
 Davis, W. N.....Wayne County General Hosp., Eloise
 Dawson, W. A. (R).....304 Ave., B S.E., Winter Haven,
 Florida
 Day, Andrew J.....710 David Whitney Bldg., Detroit
 Day, J. Claude.....307 David Whitney Bldg., Detroit
 Dean, C. Robert.....Rehabilitation Institute of Detroit,
 8811 Hamilton Ave., Detroit 2
 DeBusk, R. W.....4160 John R. St., Detroit 1
 Deering, Robert J.....1359 Champaign, Lincoln Park
 DeFever, C. R.....19787 Mack Ave., Detroit 36
 DeGroat, Albert F.....10205 W. Outer Dr., Detroit 23
 DeGuistino, Caesar.....1175 E. Grand Blvd., Detroit 11
 DeJongh, Edwin.....Pontiac Motor Div. GMC, Pontiac 11
 Delaini, Stella M.....461 Fisher Bldg., Detroit 2
 Delaney, James R.....1020 David Whitney Bldg.,
 Detroit 26
 DeLawrence, Betty J.....21576 Michigan, Dearborn
 DeLawrence, Thomas (A).....Grace Hospital, Detroit
 Del Giorno, T. E.....St. John's Hospital, Detroit
 Demaray, John F.....15312 Burt Road, Detroit 23
 Dennis, M. S.....751 S. Military Ave., Dearborn
 DePaulis, D. C.....16321 Mack Ave., Detroit 24
 DePonio, Sylvester A.....20215 Van Dyke, Detroit 12
 Deresz, Alphonse R.....19444 Van Dyke, Detroit
 Derleth, Paul E.....562 W. Oakridge, Ferndale
 Derr, J. W.....702 Maccabees Bldg., Detroit
 DeSmyter, George C.....15527 E. Warren, Detroit
 DeSpelder, Ray E.....2970 W. Grand Blvd., Detroit 11
 Deuby, Owen J.....15105 W. Seven Mile Road, Detroit 15
 Deur, J. J. (M).....271 Kerby Road, Detroit 30
 DeVault, Marion.....7431 Orchard, Dearborn
 Devine, Herbert W.....22101 Moross Road, Detroit 24
 Diakow, Lilian M.....2853 Biddle St., Wyandotte
 Dibble, Harry F.....1313 David Whitney Bldg., Detroit 26
 Dickson, B. R.....337 W. Grand Blvd., Detroit 16
 Dickson, Elias L., Jr.....7716 Oakland, Detroit 11
 Dickson, F. S.....5119 Milford, Detroit 10
 Dickson, L. C., Jr.....Henry Ford Hosp., Detroit 2
 Dickson, Leon A.....5119 Milford, Detroit
 Dickson, Mary D.....18424 Mack Ave.,
 Grosse Point Farms 36
 Diebel, Nelson W.....660 Cadieux, Detroit 30
 Diekman, F. C.....15800 W. McNichols Rd., Detroit 35
 Dieterich, G. C.....15800 W. McNichols, Detroit
 Dietze, Margaret R.....861 Monroe, Dearborn
 Dietzel, H. O.....1024 Seven Mile Rd., Detroit 3
 Dill, Hugh L.....16144 E. Warren, Detroit 24
 Dill, J. Lewis.....18615 Birchcrest, Detroit 21
 DiLoreto, Panfilo C.....205 Vincennes Place,
 Grosse Pointe Farms 36
 DiMaso, G. J.....21501 Kelly, East Detroit
 Dimond, George E.....861 Monroe Blvd., Dearborn
 Disney, Charles T.....25841 Pineview St., Centerline
 Dittmer, Edwin F.....18412 Mack Ave.,
 Grosse Pointe Farms 30
 Ditzler, J. W.....Henry Ford Hospital, Detroit 2
 Dixon, Fred W.....530 N. Telegraph Road, Dearborn
 Dixon, Ray S.....5001 Van Dyke Ave., Detroit 13
 Dixon, Robert K.....1004 Maccabees Bldg., Detroit 2
 Dods, John C. (L).....1355 David Whitney Bldg.,
 Detroit 26
 Dodenhoff, Chas. F.....791 E. Grand Blvd., Detroit 7
 Dodrill, F. D.....1553 Woodward, Detroit
 Doering, Wendell R.....17555 James Couzens, Detroit 35
 Doerr, Louis E., Jr.....16834 Shaftsbury Rd., Detroit 19
 Dolan, E. A.....817 David Whitney Bldg., Detroit 26
 Dolega, Stanley F.....10053 Gratiot Ave., Detroit
 Dolgoff, Sidney.....15600 Michigan Ave., Dearborn
 Domzalski, Casimir A.....5361 McDougall Ave.,
 Detroit 11
 Domzalski, H. M.....15252 Gratiot, Detroit 2
 Donald, Douglas.....7815 E. Jefferson, Detroit 7
 Donovan, D. R.....8704 Grand River Ave., Detroit 4
 Donovan, Eugene T.....13365 Michigan, Dearborn
 Donovan, Richard S.....17555 James Couzens, Detroit 35
 Doran, J. H.....15101 Plymouth Road, Detroit
 Dorman, Jack.....Harper Hospital, Detroit
 Dorsey, John M.....65 Moss St., Highland Park 3
 Doty, Chester A. (L).....1735 David Whitney Bldg.,
 Detroit 26
 Doub, Howard P.....Henry Ford Hospital, Detroit
 Dougherty, Edward A.....18241 W. McNichols,
 Detroit 19
 Douglas, Clair L.....405 David Whitney Bldg., Detroit
 Douglass, R. C.....32316 Grand River Ave., Farmington
 Dovitz, Benj. W.....95 Martin Place, Detroit
 Dowdle, Edward F.....2501 W. Grand Blvd., Detroit 8
 Downer, Ira G.....8445 E. Jefferson Ave., Detroit
 Downes, George O.....8007 Harper, Detroit 13
 Drake, Ellet H.....Henry Ford Hosp., Detroit 2
 Drake, J. J. (R).....8845 Marygrove Drive, Detroit 21
 Draves, Edward F.....19647 Joy Road, Detroit 28
 Drazek, Joseph A.....18980 Wyoming, Detroit 21
 Drows, Robert S.....12500 Broadstreet, Detroit 4
 Drinkhaus, H. I., Lt. Col. MC (M).....7th Evac. Hosp.,
 APO 34, c/o PM, New York. N.Y.
 Droock, Victor.....10 Peterboro, Detroit 1
 D'Sena, Dorothy.....22470 Nona, West Dearborn
 Dubin, Joseph J.....10401 W. Chicago Blvd., Detroit 4
 Dubnove, Aaron.....2115 W. Grand Blvd., Detroit 8
 DuBois, Paul W.....1708 Broderick Tower, Detroit 26
 Dubpernell, Martin S. (L).....4019 Gilbert, Detroit 10
 Dubpernell, R. O.....18595 Grand River, Detroit 23
 Dudek, J. J.....16401 Grand River, Detroit 27
 Dumke, P. R.....Henry Ford Hospital, Detroit 2
 Duncan, J. R. (M).....8633 John R St., Detroit 1
 Dundas, Edward M.....4700 Schaff, Dearborn
 Dunlap, Henry A.....7815 E. Jefferson Ave., Detroit 14
 Dunn, Cornelius E.....18145 Mack Ave., Detroit
 Dupler, Gerald.....10 Peterboro, Detroit 1
 Durham, Everett.....904 S. Military, Dearborn
 Durocher, Edmund J. (L).....4158 W. Jefferson,
 Detroit 29
 Durocher, Raymond E.....4158 W. Jefferson, Ecorse
 Dutcher, Dwight J.....18514 Mack Ave.,
 Grosse Pte. Farms 36

Duwe, Frank A.....25296 Fenkell, Detroit
Dwaihy, Paul J.....14530 E. Warren, Detroit
Dwyer, Francis W.....18000 James Couzens Hwy., Detroit
Dykema, Rosemary.....18424 Mack Ave., Detroit 36
Dziuba, John F.....18901 W. Warren, Detroit 28
Eades, Charles C.....863 Fisher Bldg., Detroit 2
Eadie, G. A.....16883 Southampton, Livonia
Eakins, F. J. (R).....Henderson Co., Robards, Ky.
Easterley, Robert L.....2854 Biddle Ave., Wyandotte
Eaton, Crosby D.....462 Fisher Bldg., Detroit 2
Ebner, C. M. (A).....22925 Colony, St. Clair Shores
Echt, Raymond.....3320 W. Chicago, Detroit 6
Eckhous, Arthur W.....1015 Kales Bldg., Detroit
Eder, Samuel J.....1116 Maccabees Bldg., Detroit 2
Edgar, Irving I.....712 Maccabees Bldg., Detroit 2
Edmonds, Gerald W.....18425 Morang Drive, Detroit 5
Edmonds, W. N.....18525 Merriman Road, Livonia
Edmondson, Robert B.....18501 Mack Ave., Detroit 24
Eisman, Clarence H.....1121 Whittier Rd.,
Grosse Pointe 30
Eldredge, Edward F.....18540 Mack Ave.,
Grosse Pointe 36
Elliott, R. N.....8100 E. Jefferson, Detroit 14
Elliott, William G.....4101 Fenkell, Detroit 21
Ellis, F. R.....1440 Venice Ave., Dearborn 8
Elman, Meyer J.....14002 Woodward, Detroit
Elson, Abraham.....22519 Plymouth, Detroit 28
Elvidge, Robert J.....2900 W. Grand Blvd., Detroit
Emmert, Herman C. (L).....7303 Grandmont, Detroit 10
Engel, E. H.....2336 Van Alstyne Blvd., Wyandotte
Engstrom, F. W.....Veteran's Adm. Hospital, Dearborn
Engstrom, Ruby M.....1777 Culver Ave., Dearborn
Eno, Laurel S.....20960 Kelly Road, East Detroit
Ensign, Dwight C.....Henry Ford Hospital, Detroit
Epstein, S. G.....6438 Van Dyke, Detroit 13
Erickson, Eldon W.....2900 S. Fort St., Detroit 26
Erkfitz, A. W.....1553 Woodward, Detroit 26
Erman, Joseph M.....9225 Grand River Ave., Detroit 4
Eschbach, J. W.....935 S. Military, Dearborn
Estabrook, Bert U. (L).....850 Virginia Park, Detroit 2
Ettinger, Clayton J. (L).....18734 Woodward, Detroit 3
Evans, E. W.....9025 Linwood, Detroit 6
Evans, G. P., Jr.....414 David Whitney Bldg., Detroit 26
Evans, Jos. M.....10500 E. Warren Ave., Detroit 13
Evans, Leland S.....20953 Grand River, Redford 19
Evison, Emerson O.....Ilq. 2nd Armored Div., APO 42,
c/o PM New York, N.Y.
Ewing, C. H.....526 University Place, Detroit 30
Eyler, W. R.....Henry Ford Hospital, Detroit 2
Eyres, A. E.....567 Fisher Bldg., Detroit
Fachnic, H. L.....4741 Spokane, Detroit 4
Faello, S. J.....16840 E. Warren, Detroit 24
Fagin, I. Donald.....18254 Livernois, Detroit 21
Falick, Mordecai Louis.....960 Fisher Bldg., Detroit
Falk, Ira E.....7925 W. Verner Hwy., Detroit 9
Fallis, Lawrence S.....Henry Ford Hosp., Detroit 2
Fandrich, Theodore S.....1376 Lochmoor Blvd.,
Grosse Pte. 30
Farbman, Aaron A.....14515 Kercheval, Detroit 15
Farmer, W. L.....8633 John R. St., Detroit 2
Farnam, L. M., Jr.....19787 Mack Ave., Detroit 36
Faunce, Sherman P.....8300 Kercheval, Detroit 14
Fea, J. F.....Mt. Carmel Mercy Hospital Detroit
Feigelson, H. H.....Sinai Hospital, Detroit 35
Felcyn, W. George.....2091 West Grand Blvd., Detroit 8
Feld, David.....15101 W. McNichols Rd., Detroit 35
Feldkamp, Lee E.....585 Forest, Plymouth
Feldman, N. L.....17338 Woodingham, Detroit
Feldman, Paul.....954 Maccabees Bldg., Detroit 2
Feldstein, M. Z. (A).....17765 Manderson Rd., Detroit 3
Fellers, Ray L.....6505 Grand River, Detroit 8
Fenech, Harold B.....324 Professional Bldg., Detroit
Fenner, William G.....12454 E. Outer Dr., Detroit 24
Fennessey, J. F.....1551 David Whitney Bldg., Detroit 26
Fenton, Edwin H.....15125 Grand River Ave., Detroit 27
Fenton, Meryl M.....8600 W. McNichols Road, Detroit
Fenton, Russell F.....15125 Grand River Ave., Detroit 27
Fenton, Stanley C.....15310 E. Warren St., Detroit 24

Fentress, Vance.....1139 David Whitney Bldg., Detroit 26
Ferrara, Louis V.....13805 Parkgrove Ave., Detroit 5
Ferrara, Virginia M.....18422 Woodward Ave., Detroit 3
Ferrell, R. D. (M).....270 Rochester Ave., Brooklyn, N.Y.
Ferris, George N.....25085 Coolidge, Oak Park
Fettig, Carl A. (L).....1026 Harvard Rd.,
Grosse Pte. Park 30
Figiel, Leo S.....18700 Meyers Rd., Detroit 21
Figiel, S. J.....1429 David Whitney Bldg., Detroit 26
Fill, Leon.....1506 David Broderick Tower, Detroit
Finch, A. D.....18000 James Couzens Hwy., Detroit 35
Finch, F. Sinclair.....894 N. Renaud,
Grosse Pte. Woods 36
Finck, J. H.....25447 Plymouth Rd., Detroit 39
Fine, Edward.....1112 Kales Bldg., Detroit 26
Fink, Samuel.....987 E. Jefferson, Detroit 7
Finkell, Lawrence J.....15231 W. Seven Mile Rd.,
Detroit 35
Finkelstein, Lionel.....275 W. Grand Blvd., Detroit 16
Finkelstein, M. B.....17300 Schaefer Road, Detroit 35
Firnchild, P. G.....2966 Biddle St., Wyandotte
Fischer, Frederick J.....205 Professional Bldg., Detroit 1
Fischhoff, Joseph.....18674 Fairchild, Detroit 2
Fishbein, H. L.....987 E. Jefferson, Detroit 7
Fisher, G. S.....1709 David Whitney Bldg., Detroit 26
Fisher, James M.....79 Kercheval, Grosse Pointe
Fisher, O. O. (L).....2475 Iroquois Ave., Detroit 14
Fisher, Ralph L.....8445 Jefferson, Detroit
Fitzgerald, James M.....2536 W. Grand Blvd., Detroit 8
Flaherty, H. J.....15865 Wyoming, Detroit 21
Flaherty, N. W.....3677 Fort St., Lincoln Park
Fleming, Joseph L.....Henry Ford Hospital, Detroit 2
Flora, William Robert.....8100 E. Jefferson, Detroit 14
Flower, J. A.....14140 Puritan, Detroit 27
Fogt, Herbert E.....11801 Morang, Detroit
Fogt, Robert G.....11801 Morang, Detroit
Folberg, Irving I.....862 W. McNichols Road, Detroit 3
Foley, Hugh S.....22255 W. Michigan, Dearborn 23
Font, Anthony J.....710 Kales Bldg., Detroit 26
Ford, George A. (L).....803 Stroh Bldg., Detroit 26
Fordell, F. S.....441 S. Oakwood, Detroit
Forgrave, E. G.....18520 Grand River Ave., Detroit 23
Forrer, Gordon R.....21603 Grand River, Detroit
Fosnaugh, R. P.....Henry Ford Hospital, Detroit 2
Foster, E. Bruce.....853 Fisher Bldg., Detroit 2
Foster, Owen C.....1015 David Whitney Bldg., Detroit 26
Foster, Wallace M.....13700 Woodward Ave., Detroit 3
Foster, William L.....2567 W. Grand Blvd., Detroit 8
Fowler, Melvin E.....247 E. Warren, Detroit
Fox, Morris Edward.....10 Peterboro, Detroit 1
Fraiberg, Paul L.....13001 W. Chicago, Detroit 27
Frame, Boy.....Henry Ford Hospital, Detroit 2
France, C. J.....838 Berkshire, Crosse Pointe 30
Franja, Marion J.....25447 Plymouth Road, Detroit 28
Franzen, Nils A.....19566 Grand River, Detroit 23
Frazer, Mary Margaret.....812 Kales Bldg., Detroit 26
Frederickson, G. C.....3919 John R St., Detroit
Free, Harry W.....14300 W. Six Mile Road, Detroit 35
Freedman, John.....4853 Second Blvd. at Warren Ave.,
Detroit 1
Freedman, Milton.....18626 Santa Barbara St., Detroit 21
Freeman, D. K.....881 Chalmers, Detroit 15
Freeman, Mable.....1316 Broderick Tower, Detroit 26
Freeman, Michael W.....401 David Whitney Bldg.,
Detroit 26
Freeman, Wilmer.....940 E. Seven Mile Road, Detroit 3
Freid, Samuel.....17537 Parkside, Detroit 21
Freier, Morton L.....13051 Puritan Ave., Detroit 27
Freitas, E. L.....St. Johns Hospital, Detroit 24
Fremont, Joseph C.....1202 David Whitney Bldg.,
Detroit 26
Frenkel, E. P.....4400 Livernois, Detroit 10
Frey, James L.....755 David Whitney Bldg., Detroit 26
Friedlaender, Alex S.....10300 W. Seven Mile Road,
Detroit 21
Friedlaender, Sidney.....10300 W. Seven Mile Road,
Detroit 21

Guerrero, Jose.....13535 Woodward, Detroit
Guidot, J. M.....16401 Grand River, Detroit 27
Guimaraes, A. S.....7301 Shaefer Highway, Dearborn
Guinan, G. E.....27614 Gainsborough St., Inkster
Gulick, Arthur E.....1429 David Whitney Bldg., Detroit 26
Gunn, C. G.....21500 Oakwood Blvd., Dearborn
Gurdjian, E. S.....840 David Whitney Bldg., Detroit 26
Gurskis, Eugenia.....504 Kales Bldg., Detroit
Gutow, Benjamin R.....602 Maccabees Bldg., Detroit
Guyton, Jack S.....Henry Ford Hospital, Detroit 2

Hacker, Elaine M.....2201 E. Jefferson, Detroit
Hackleman, G. L. (A).....430 Pitsanuloke Rd.,
Bangkok, Thailand
Haddad, B. F.....1010 Michigan Mutual Bldg., Detroit 26
Hadesman, Donald.....985 E. Jefferson, Detroit 7
Haeefe, Leslie P.....29108 Ford Rd., Garden City
Hagge, D. R.....641 David Whitney Bldg., Detroit 26
Hague, Gilbert.....3919 John R. St., Detroit 1
Haidostian, B. H.....18456 Grand River, Detroit 23
Haitinger, K. S.....327 Professional Bldg., Detroit
Haking, Leonard.....14014 E. Seven Mile Rd., Detroit 13
Hale, Arthur S.....1501 David Whitney Bldg., Detroit
Halekas, G. P.....21727 Mack, St. Clair Shores
Hall, A. H.....10 Peterboro, Detroit 1
Hall, E. Walter.....10 Peterboro, Detroit 1
Hall, James A. J.....186 Moss Ave., Highland Park 3
Hall, Ralph E.....10 Peterboro, Detroit 1
Hall, Robert J.....6014 W. Fort St., Detroit 9
Hall, Winthrop D.....36200 Plymouth Rd., Livonia
Hallen, Leonard J.....14032 Ohio, Detroit 38
H'Amada, Norman K.....904 Maccabees Bldg., Detroit 2
Hamburg, Robert H.....1515 David Whitney Bldg.,
Detroit 26
Hamburger, A. C.....10 Witherell St., Detroit 26
Hamburger, S. W.....16650 James Couzens Highway,
Detroit 21
Hamil, Brenton M.....Henry Ford Hospital, Detroit
Hamilton, Norman C.....300 W. McNichols Rd.,
Highland Park
Hamilton, Q. P.....1613 David Whitney Bldg., Detroit 26
Hamilton, W. F. (L).....234 East Grand Blvd., Detroit 7
Hammer, Edwin J.....16616 Mack, Detroit 24
Hammer, Roy W.....16620 E. Warren, Detroit
Hammond, Arthur E.....1863 David Whitney Bldg.,
Detroit 26
Hammond, J. L. (L).....1911 Sunset Dr., R. I.,
Escondido, Calif.
Hand, Fordus V.....81 East Kirby, Detroit 2
Hank, Emil.....8261 Cheyene, Detroit 28
Hansen, Frederick E.....120 Glynn Court, Apt. 700,
Detroit 2
Hanyi, Karl.....1771 Ackley, Wayne
Hardstaff, R. John (L).....648 Neff Rd., Grosse Pointe 30
Hardt, Barbara A.....Chrysler Corp., Lynch Rd., Detroit 5
Harelík, E. W.....15201 W. McNichols, Detroit 35
Harkaway, Roman W.....19125 Van Dyke, Detroit 34
Harley, G. H.....21831 Willoway Rd., Dearborn
Harley, Louis M.....4100 W. McNicholas Rd., Detroit 21
Harm, Winfred B.....5884 West Vernor Highway,
Detroit 9
Harmon, L. G. (M).....987 E. Jefferson, Detroit
Harmon, Walter.....2510 E. Davison, Detroit 12
Harper, Jesse T.....1248 David Whitney Bldg., Detroit 26
Harrell, Voss.....1035 Oakwood, Dearborn 7
Harrington, Frank L.....8935 Fenkell, Detroit 21
Harris, Arthur D.....6675 Tireman, Detroit 4
Harris, Harold H.....8011 W. Vernor Highway, Detroit
Harris, Ivor David.....817 David Whitney Bldg., Detroit 26
Harris, L. C. (M).....1401 Rivard St., Detroit
Harrison, Wesley.....4847 Iroquois, Detroit 14
Harrison, W. L.....1110 Clairmont, Detroit 2
Hart, C. E.....23845 Van Dyke, Centerline
Hart, John Clarence.....9341 Moffat, Detroit
Harten, James.....2900 S. Fort St., Detroit 17
Hartkop, Henry H.....20055 Mack Ave., Detroit 36
Hartquist, R. J.....1495 Fort St., Wyandotte
Hartzell, John B.....7815 Jefferson Ave., Detroit 14

Hasley, Clyde K.....1429 David Whitney Bldg., Detroit 26
Hasley, Daniel E.....1401 Rivard St., Detroit 7
Hassig, W. W.....14504 Mack Ave., Detroit 15
Hastings, Orville J.....15744 Harper, Detroit 24
Haszczye, V. A.....Industrial Hospital, Detroit 7
Hathaway, Hubert R.....230 Madison Ave., Detroit 26
Hauf, Mary A.....Brent General Hospital, Detroit 21
Hause, Glen E.....18520 Grand River, Detroit 23
Hauser, I. Jerome.....7411 Third Ave., Detroit 2
Hauser, John E.....671 Fisher Bldg., Detroit 2
Hauser, Maurice J. (A).....7411 Third Ave., Detroit
Hauss, R. B.....7348 Kercheval, Detroit 14
Havers, Howard.....1032 Maccabees Bldg., Detroit 2
Hawkins, James W.....14237 Greenfield, Detroit 27
Hazen, Roy S.....20526 Grand River Ave., Detroit 23
Heath, Leonard P.....1457 David Whitney Bldg.,
Detroit 26
Heavner, Lyle E.....119 Kercheval, Detroit
Hecht, Manes S.....25622 Coolidge Hwy.,
Huntington Woods
Heenan, Theophilus H.....1409 David Whitney Bldg.,
Detroit 26
Heideman, Louis E.....20211 Greenfield, Detroit 35
Heldt, R. F.....1951 Monroe, Dearborn
Heldt, Thomas J. (L).....Henry Ford Hospital, Detroit 2
Hellem, H. K.....319 Moross, Grosse Pointe Farms
Hendelman, Manuel H.....14350 Harper, Detroit 13
Henderson, A. B.....9041 Dexter, Detroit 6
Henderson, Arthur B.....10452 Mack, Detroit
Henderson, Charles W.....853 Fisher Bldg., Detroit
Henderson, Harold.....852 Fisher Bldg., Detroit 2
Henderson, H. W.....308 Professional Bldg., Detroit 1
Henderson, Leslie T.....14814 E. Warren, Detroit 15
Henderson, William E.....9341 Chalmers, Detroit 13
Hendry, H. W.....2716 Rochester, Detroit 6
Henig, Fred N.....7605 W. Seven Mile Rd., Detroit 21
Henkin, Raymond.....20232 Braile, Detroit
Henkin, William A.....19166 James Couzens, Detroit 35
Henry, R. C.....16127 Baylis, Detroit 21
Herbst, Harold B.....20482 Ardmore, Detroit 21
Herkimer, Dan R.....1802 Buckingham, Lincoln Park 25
Herrold, Rose E.....1277 E. Grand Blvd., Detroit 11
Herschelmann, Roy F.....3343 Gratiot Ave. at Mack,
Detroit 7
Hertzler, Jack H.....869 Fisher Bldg., Detroit 2
Herwick, John T.....Henry Ford Hospital, Detroit 2
Hess, Murray W.....13732 Woodward Ave., Detroit 3
Hewitt, Leland V.....917 David Whitney Bldg., Detroit 26
Heyman, Louis.....19001 W. Seven Mile Rd., Detroit 19
Heyner, Stanley A.....3424 Oakman Blvd., Detroit 4
Hickey, Joseph.....6004 W. Fort St., Detroit 9
Hicks, Fred G.....14001 Greenfield Ave., Detroit 27
Higbee, Arthur L.....429 E. Grand Blvd., Detroit 7
Hileman, S. Lee.....4043 W. Jefferson, Ecorse
Hill, E. J., Jr.....1515 David Whitney Bldg., Detroit 26
Hill, Gerald (M).....Valley Forge Army Hospital,
Phoenixville, Pa.
Hill, Welford T.....6303 Mack Ave., Detroit
Hillenberg, Sidney J.....20215 W. Seven Mile Rd.,
Detroit
Hillenbrand, Alfred E.....14321 Kercheval, Detroit 15
Hiller, Glenn I.....13700 Woodward Ave., Detroit 3
Hiller, H. M.....987 E. Jefferson, Detroit 7
Hillier, Leland G.....18750 Woodward Ave., Detroit 3
Hillyer, J. W.....26151 Huron River Dr., Flat Rock
Hilton, W. E.....5013 Harding, Detroit 13
Hippis, C. J.....2605 W. Grand Blvd., Detroit 8
Hiratzka, Tomiharu.....1401 Rivard, Detroit
Hirsch, Lore.....22671 Garrison, Dearborn
Hirschfeld, A. H.....829 Fisher Bldg., Detroit
Hirschman, L. J. (L).....2619 Munson Ave., Traverse City
Hoagland, Thomas V.....81 E. Kirby, Detroit
Hobbs, Donald V.....27305 Southfield Rd.,
Lathrup Village
Hochman, Morton M.....16633 Plymouth Rd., Detroit 27
Hodges, Jason.....1200 S. Oxford Rd.,
Grosse Pointe Woods 30

Hodgkinson, C. P.....Henry Ford Hospital, Detroit
Hoffer, Thomas.....5825 Allen Rd., Allen Park
Hoffman, Edward A.....7615 W. Vernor Hwy., Detroit
Hoffman, E. S.....766 Fisher Bldg., Detroit 2
Hoffman, Harry Y.....15085 E. Seven Mile Rd., Detroit 5
Hoffman, Henry A.....10015 E. Outer Dr., Detroit 24
Hoffman, Louis.....19308 Wyoming, Detroit 21
Hoffman, M. C. (M).....Parks AFB Hospital,
Pleasanton, Calif.
Hoffmann, Martin H.....1311 David Whitney Bldg.,
Detroit 2
Hogikyan, Azat.....Herman Kiefer Hospital, Detroit 2
Holdredge, Jean M.....972 Fisher Bldg., Detroit 2
Hollander, A. J.....8026 Michigan Ave., Detroit 10
Hollinger, F. W.....Henry Ford Hosp., Detroit 2
Hollis, Henry B.....6809 Sarina, Detroit 10
Holloway, H. R.....2017 W. Boston Blvd., Detroit 6
Holloway, Janet L.....3919 John R. St., Detroit 1
Holt, C. J., Jr.....1575 Faircourt, Grosse Pointe 36
Holt, Henry.....5050 Cass, Detroit
Honhart, Fred L. (L).....1405 Berkshire Rd.,
Grosse Pointe 30
Hooker, L. T.....35550 Michigan, Wayne
Hokey, John A.....2918 Biddle, Wyandotte
Hooper, Norman L.....6 Port Dr., Detroit
Hoops, George B. (L).....754 Fisher Bldg., Detroit
Hopkins, Scovell.....636 Maccabees Bldg., Detroit 2
Hopkins, W. J.....Henry Ford Hospital, Detroit 2
Horkins, E. J.....14300 W. McNichols Rd., Detroit 35
Horkins, Harold A.....893 Lakewood, Detroit
Horn, R. C.....Henry Ford Hospital, Detroit 2
Horny, Hugo O.....11600 Whittier, Detroit 24
Horton, Reece H.....938 David Whitney Bldg., Detroit 26
Horvath, James J.....1337 David Whitney Bldg., Detroit 26
Hotchkiss, Lorin M.....33220 W. 7 Mile Rd., Livonia
House, W. W., Jr.....10350 Twelfth St., Detroit 6
Howard, Austin Z.....825 David Whitney Bldg., Detroit 26
Howard, Philip J.....Henry Ford Hospital, Detroit 2
Howell, Bert F.....10800 Whittier, Detroit 24
Howell, James T.....Henry Ford Hospital, Detroit 2
Howell, R. S.....Northville State Hospital, Northville
Howes, Homer A.....1515 David Whitney Bldg., Detroit
Howes, Willard Boyden.....2305 Pinecrest Dr., Ferndale 20
Howlett, Howard T.....868 Fisher Bldg., Detroit 2
Hranchook, Michael.....5042 Haverhill, Detroit 24
Hromadko, Louis.....1075 Fisher Bldg., Detroit 26
Hubbard, John P.....14620 E. Seven Mile Rd., Detroit 5
Huber, Phillip J.....10 Peterboro, Detroit
Hudson, J. Stewart.....17443 E. Jefferson Ave.,
Grosse Pointe
Hudson, William A.....602 David Whitney Bldg.,
Detroit 26
Hudspeth, E. Rae.....753 Fisher Bldg., Detroit 2
Huegli, Wilfred A.....200 Moross Rd.,
Grosse Pte. Farms 36
Hulick, A. G.....1800 Tuxedo, Detroit 6
Hull, LeRoy W.....1701 David Whitney Bldg., Detroit 26
Hume, H. R., Jr.....702 David Whitney Bldg., Detroit 26
Huminski, T. S.....19244 Van Dyke, Detroit 34
Hummel, Arthur R.....8045 E. Jefferson, Detroit
Hunt, T. H.....19431 Van Dyke, Detroit 12
Hunt, Verne G.....723 David Whitney Bldg., Detroit 26
Husband, Chas. W.....3810 Northwestern Ave., Detroit 6
Husband, R. C.....3810 Northwestern, Detroit 6
Hutchins, M. Colton.....773 Fisher Bldg., Detroit 2
Hyatt, Jarvis M.....22340 Michigan, Dearborn
Hyde, Frederick W., Jr.....Grace Hospital, Detroit 1
Hyland, John R.....13030 Mack Ave., Detroit 15
Hyman, Samuel J.....27342 Michigan Ave., Inkster
Iacobell, Peter H.....19300 Van Dyke, Detroit 34
Ice, G. T.....18060 Conant St., Detroit 34
Igna, Eli J.....Henry Ford Hospital, Detroit 2
Irvin, Earle Albert.....Ford Motor Co., 3000 Schaefer Rd.,
Dearborn
Irwin, William A.....Providence Hospital, Detroit 8
Isaacson, Arthur.....2921 E. Davison Ave., Detroit 12
Isaacson, H. E.....15101 W. Seven Mile Rd., Detroit

Iseri, Lloyd T. (M).....Wayne University, Detroit
Israel, Barney B.....1424 Maccabees Bldg., Detroit
Israel, Joseph G.....870 Maccabees Bldg., Detroit 21
Israel, Kenneth.....1072 Maccabees Bldg., Detroit 2
Iwata, Herbert.....7611 Patton Ave., Detroit 28
Izner, S. F.....17500 Schaefer, Detroit 35
Jacobs, Arnold.....28671 Plymouth Rd., Livonia
Jacobson, L. F.....14123 Riverview, Detroit 23
Jacobson, Samuel D.....2435 Oakman Blvd., Detroit 4
Jacobus, W. N.....21535 Kingsville Dr., Apt. 205,
Harper Woods 36
Jaeger, Grove A.....11711 Minden, Detroit 5
Jaekel, C. N.....1086 E. Grand Blvd., Detroit 7
Jaffar, Donald J.....734 Maccabees Bldg., Detroit 2
Jaffe, H. W.....1536 David Whitney Bldg., Detroit 26
Jaffe, J. L.....7465 Harper, Detroit 13
Jaffe, Jacob.....501 Fox Theater Bldg., Detroit 1
Jaffe, Louis.....1002 David Whitney Bldg., Detroit 26
Jahsman, William E.....Henry Ford Hospital, Detroit 2
Jamieson, Thomas J.....1310 Warwick, Lincoln Park
Janicki, Natalia J.....Wayne Co. General Hospital, Eloise
Jarre, Hans A.....Grace Hospital, Detroit
Jarsen, Frank J.....817 Beechmont, Dearborn
Jarvis, Harold F.....14110 Gratiot Ave., Detroit
Jasion, Lawrence J.....11945 Payton Ave., Detroit
Jaynes, Richard V.....25296 Fenkell, Detroit
Jeffries, Benjamin.....16321 Mack Ave., Detroit 24
Jend, William, Jr.....1365 Cass Ave., Detroit 26
Jend, W. J. (L).....3598 Mitchell, Detroit 7
Jenkins, Elwood A.....514 Kales Bldg., Detroit
Jenkins, Sidney B. (M).....Army Med. Ser. Sch.,
Course 8-0-31 #5, Fort Sam Houston, Tex.
Jennings, Charles G.....14827 E. Jefferson, Detroit 15
Jennings, Elmer R.....432 E. Hancock, Detroit 1
Jensen, V. W.....532 Lincoln Rd., Grosse Pointe 30
Jentgen, Chas. J. (L).....22101 Moross Rd., Detroit 24
Jeremias, Robert C.....13300 Livernois, Detroit 4
Jerius, D. H.....9437 Van Dyke, Detroit 13
Jewell, F. C.....7220 Gratiot Ave., Detroit 13
Jewell, J. S.....751 S. Military, Dearborn
Jocz, M. W.....Chrysler Corp., 341 Massachusetts Ave.,
Detroit 31
Jodar, E. O.....15760 Mack, Detroit 24
Jodar, L. W. (A).....21741 Edmunton Dr.,
St. Clair Shores
John, Hubert R.....650 Maccabees Bldg., Detroit 2
Johnson, A. S.....816 David Whitney Bldg., Detroit 26
Johnson, D. S.....536 Vinewood, Birmingham
Johnson, Homer L.....Henry Ford Hospital, Detroit 2
Johnson, J. F.....1401 Rivard, Detroit 7
Johnson, Ralph A.....7815 E. Jefferson, Detroit 14
Johnson, R. P.....Henry Ford Hospital, Detroit 2
Johnson, Thomas D.....20526 Grand River, Detroit
Johnson, Vernon P.....21327 Harper Ave.,
St. Clair Shores
Johnson, Vincent C.....10 Peterboro, Detroit
Johnson, W. E.....13626 E. Seven Mile Rd., Detroit 5
Johnson, W. H. M.....7159 Michigan, Detroit 10
Johnston, Charles G.....1401 Rivard, Detroit
Johnston, E. V.....3919 John R St., Detroit
Johnston, J. L. (A).....1950 W. McNichols Rd., Detroit 3
Johnston, Joseph A.....Henry Ford Hospital, Detroit
Johnston, T. C.....1314 David Whitney Bldg., Detroit 26
Johnston, William E.....1071 Fisher Bldg., Detroit 21
Johnstone, B. I.....555 Fisher Bldg., Detroit 2
Joinville, E. V. (L).....1202 Stroh Bldg., Detroit 26
Jones, Adrian R.....15309 Mack Ave., Detroit 24
Jones, Edna M.....Maybury Sanatorium, Northville
Jones, Roy D.....10234 Puritan Ave., Detroit 38
Jones, W. J.....2514 Biddle, Wyandotte
Joyce, Stanley J.....1078 Fisher Bldg., Detroit 2
Juliar, Benjamin.....4100 W. McNichols Rd., Detroit 21
Jury, Donald B.....18800 Woodward, Detroit 3
Kaine, H. D.....767 Fisher Bldg., Detroit 2
Kalayjian, Bernard S.....Woman's Hospital, Detroit 1
Kalichman, Nathan.....532 Maccabees Bldg., Detroit 2
Kallenbach, R. W.....985 Suningale Dr., Inkster

Kallet, Herbert I.....944 Maccabees Bldg., Detroit 2
 Kallet, Maerit.....8620 W. McNichols, Detroit 21
 Kallman, David.....5725 Cass, Detroit 2
 Kallman, Leo.....5725 Cass, Detroit 2
 Kallman, R. Robert.....2632 Woodward Ave., Room 202,
 Detroit 1
 Kamil, R. S.....12901 West 7 Mile Rd., Detroit 21
 Kamin, Louis E.....4642 Second Blvd., Detroit
 Kaminski, Zeno L.....3504 24th St., Detroit 8
 Kamperman, George A. (L).....1807 David Whitney Bldg.,
 Detroit 26
 Kane, A. V.....Providence Hospital, Detroit 8
 Kansa, Selma.....19431 Van Dyke, Detroit 34
 Kanter, Herman.....13127 West 7 Mile Rd., Detroit 21
 Kapetansky, A. J.....1728 Clairmont, Detroit 6
 Kapetansky, N. J.....4505 Livernois, Detroit 10
 Kaplita, W. A.....60 Fontana Lane,
 Grosse Pointe Shores 36
 Karch, Saul.....12805 Broadstreet Blvd., Detroit 38
 Kasabach, Harry Y.....952 David Whitney Bldg.,
 Detroit 26
 Kasabach, V. Y.....523 Book Tower Bldg., Detroit 26
 Kashtan, H. A.....1410 David Broderick Tower, Detroit 26
 Kasper, Joseph A.....Bon Secour Hospital,
 Grosse Pointe 30
 Kaspor, Albert J.....16715 Harper Ave., Detroit
 Kass, Arnold.....1316 David Stott Bldg., Detroit
 Katz, Lawrence.....987 E. Jefferson, Detroit 7
 Katzman, I. S.....412 Fox Theater Bldg., Detroit 1
 Kaufman, J. M.....618 David Whitney Bldg., Detroit
 Kaufman, L. W.....19467 Livernois, Detroit 21
 Kaup, Donald H.....Providence Hospital, Detroit 8
 Kauppinen, J. A.....15400 Plymouth Rd., Detroit 27
 Kawchak, James.....Ford Motor Company, Dearborn
 Kaweck, Lucian.....3245 E. Jefferson, Detroit 7
 Kawel, C. A., Jr.....6356 Michigan Ave., Detroit 10
 Kazdan, Morris.....15024 McLain, Allen Park
 Keating, Thomas F. (L).....18675 Gainsborough,
 Detroit 23
 Kehoe, Henry J.....15252 Gratiot, Detroit 5
 Keim, H. L.....1110 David Broderick Tower, Detroit 26
 Keith, Kelly.....106 West Davison, Detroit 3
 Keith, Rachel Boone.....18060 Conant, Detroit 34
 Kelley, Frank James.....3919 John R. St., Detroit
 Kelly, Edward W.....156 Harmon, Detroit 2
 Kelly, J. J.....21124 Goddard Rd., Dearborn
 Kelmenson, Victor A.....7356 12th St., Detroit 6
 Kelson, Malcolm J.....1045 Harvard, Grosse Pointe 30
 Kemler, Walter J.....4045 W. Jefferson, Ecorse 18
 Kenfield, W. J.....3350 Campbell, Dearborn
 Kennary, James M.....4900 Cadieux Rd., Detroit
 Kennedy, Chas. S.....10 Peterboro, Detroit 1
 Kennedy, Donald J.....2730 E. Jefferson, Detroit 7
 Kennedy, R. B. (R).....8900 E. Jefferson, Apt. 1228,
 Detroit 14
 Kenning, John C. (A).....6044 Waverly, La Jolla, Calif.
 Kennison, Warren S.....15800 W. McNichols Rd.,
 Detroit 35
 Kernick, M. O.....13700 Woodward Ave., Detroit
 Kernkamp, Ralph F.....1204 Broderick Tower, Detroit
 Kersten, Werner (A).....3100 Gratiot Ave., Detroit 7
 Kerzman, Joseph H.....850 Maccabees Bldg., Detroit 21
 Keshishian, Sarkis K. (L).....13544 Woodward Ave.,
 Detroit 3
 Kessler, Charles.....15105 W. Seven Mile Rd., Detroit 35
 Keyes, Eugene Charles.....4840 Maple St., Dearborn
 Keyes, John W.....Henry Ford Hospital, Detroit
 Killins, C. G.....8100 E. Jefferson, Detroit
 Kimberlin, Kenneth K.....11110 Morang Dr. at Balfour,
 Detroit 24
 King, Edward D.....5455 W. Vernor Highway, Detroit 9
 King, Melbourne J.....5455 W. Vernor Highway, Detroit 9
 Kingsley, J. W., Jr.....2201 E. Jefferson, Detroit 7
 Kingswood, Roy C.....90 E. Warren Ave., Detroit 1
 Kinsley, George.....909 Kales Bldg., Detroit
 Kirschbaum, H. M.....528 Maccabees Bldg., Detroit 2
 Kirtland, William B.....2201 E. Jefferson, Detroit 7
 Kitzmiller, John L.....15800 W. McNichols Rd.,
 Detroit 35
 Klein, Herman.....14825 W. McNichols Rd., Detroit 35
 Klein, Howard A.....1838 David Whitney Bldg., Detroit
 Klein, Sander P.....14825 W. McNichols Rd., Detroit 21
 Klein, Wm.....1795 Oakman Blvd., Detroit
 Kleinman, Shmarya.....16861 Wyoming Ave., Detroit 21
 Kliger, David.....7756 Southfield, Detroit 10
 Klokke, Karl.....12200 E. Jefferson, Detroit 15
 Klosowski, Joseph.....8222 E. Outer Dr., Detroit
 Klutke, G. H.....2900 S. Fort, Detroit 17
 Knaggs, Charles W. (L).....12244 Gratiot, Detroit 5
 Knaggs, Earl J.....3164 Biddle, Wyandotte
 Knapp, Byron S.....10909 W. Jefferson, River Rouge 18
 Knapp, G. R.....19310 Healy, Detroit 34
 Knapp, W. L.....106 West Davison, Highland Park 3
 Knighton, Robert S.....27486 Lathrup, Birmingham
 Knights, E. M., Jr.....Harper Hospital, Detroit
 Knobloch, Edmund J.....5933 Chene, Detroit 11
 Knoch, Hubert S.....14149 E. Jefferson, Detroit 15
 Knox, Ross M.....9 Salliotte, Ecorse
 Kobernick, S. D.....6767 W. Outer Dr., Detroit 35
 Kobrak, Heinrich.....1401 Rivard, Detroit 26
 Koebel, R. H.....14505 Mack Ave., Detroit 24
 Koerber, Edward J.....4876 Lakeview Ave., Detroit 13
 Kogut, C. S.....10627 Puritan, Detroit
 Kokowicz, Raymond J.....19440 Van Dyke, Detroit 34
 Kolman, I. I.....987 E. Jefferson, Detroit 7
 Koos, Laszlo (M).....No Address
 Kopel, Joseph O.....10 Peterboro, Detroit 11
 Koran, V. L.....972 Maccabees Bldg., Detroit 2
 Koren, Louis.....1214 Griswold St., Rm. 610, Detroit 26
 Korum, L. W.....18585 E. Warren, Detroit
 Koschnitzke, Herman K.....1221 Lincoln St., Lincoln Park
 Kossayda, Adam W.....15324 Michigan Ave., Dearborn
 Kovach, E. P.....14149 E. Jefferson, Detroit 15
 Kovan, D. D.....16965 Hamilton, Highland Park
 Koven, Abraham.....614 Professional Bldg., Detroit 1
 Kowaleski, J. J.....9646 Vine, Allen Park
 Kozlinski, Anthony E.....2195 E. Grand Blvd., Detroit 11
 Krabbenhoft, Kenneth.....Harper Hospital, Detroit 1
 Kraft, Raymond B.....12408 Van Dyke, Detroit 34
 Kraft, Ruth M.....655 Hamilton Rd., Birmingham
 Krakauer, Bernard.....20211 Greenfield, Detroit 35
 Krass, Edward W.....11088 Gratiot Ave., Detroit 5
 Kraus, John J.....16840 E. Warren, Detroit
 Krebs, William T.....16419 E. Warren, Detroit 24
 Kreinbring, George E.....4229 Mt. Elliott, Detroit 14
 Krenz, Marlin P. (M).....403 Polaris, First & Lacey,
 Fairbanks, Alaska
 Kretschmar, John C.....535 E. Grand Blvd., Detroit 7
 Krevsky, D. A.....2015 Fort St., Lincoln Park
 Krevsky, Seymour.....2015 Fort St., Lincoln Park
 Krieg, Earl G. N.....1842 David Whitney Bldg., Detroit 26
 Krieger, Harley L.....11390 Strathmore, Detroit 27
 Kritchman, M. J.....2314 David Broderick Tower,
 Detroit 26
 Kroha, Lawrence A.....15124 Kercheval, Detroit 30
 Kroll, H. V.....7815 E. Jefferson, Detroit 14
 Krynicki, Francis X.....15300 W. McNichols Rd.,
 Detroit 35
 Krystal, Henry.....Detroit Receiving Hospital, Detroit 26
 Kubanek, Joseph L.....23134 Myrtle St., Dearborn
 Kucmierz, Francis S.....12181 Joseph Campau, Detroit 12
 Kuhn, Albert Arthur.....90 E. Warren, Detroit 1
 Kuhn, Richard F.....1700 Junction, Detroit 9
 Kujawski, Walter.....16840 E. Warren, Detroit 24
 Kulaski, Chester H.....9309 Jos. Campau, Detroit 12
 Kullman, Harold J. F.....Veterans Administration Hosp.,
 Dearborn
 Kurcz, Joseph A.....7433 Michigan, Detroit 10
 Kurtz, Harry C.....833 Barrington Rd.,
 Grosse Pointe Park 30
 Kurtz, I. J.....503 Fox Bldg., Detroit 1
 Kutsche, John D.....2057 W. Jefferson, Trenton
 Kwasiborski, Stanley A.....2300 Oak St., Wyandotte
 Kyprie, H. M.....414 Kales Bldg., Detroit

LaBerge, James M.....100 Oak St., Wyandotte
 LaBine, A. C.....3044 W. Grand Blvd., Detroit 2
 Lackey, L. S.....525 Visger, Ecourse
 Laderach, D. C.....1217 David Whitney Bldg., Detroit 26
 La Ferte, Alfred D. (L).....1401 David Whitney Bldg.,
 Detroit 26
 LaHood, M. J.....17555 James Couzens, Detroit 35
 Laige, R. J.....7900 Joseph Campau, Detroit 11
 Lake, R. C.....275 McKinley, Detroit 36
 Lakoff, Charles.....10234 W. Seven Mile Rd., Detroit 21
 Lam, Conrad R.....Henry Ford Hospital, Detroit 2
 Lamberson, Frank A.....19001 Grand River, Detroit 23
 Lammy, James V.....644 Maccabees Bldg., Detroit 2
 Lampman, H. H.....675 Fisher Bldg., Detroit 2
 Landers, M. B.....275 W. Grand Blvd., Detroit 16
 Lang, E. F.....Harper Hospital, Detroit
 Lange, William A.....3919 John R. St., Detroit
 Langston, J. D.....1420 St. Antoine, Detroit 26
 Laning, George M. (L).....1217 David Whitney Bldg.,
 Detroit 26
 Lansky, Mandell.....14427 Mack Ave., Detroit
 Large, A. M.....1036 David Whitney Bldg., Detroit 26
 Largo, D. J.....Wayne County Gen'l Hospital, Eloise
 Larkin, D. R.....27309 Plymouth Rd., Detroit 28
 Larned, Richard I.....14182 Gratiot, Detroit
 Larsen, R. D.....1405 Kales Bldg., Detroit 26
 Larson, C. J.....12820 Ward, Wyandotte
 Larson, Francine (A).....12820 Ward, Wyandotte
 Larsson, Bror H. (L).....Doctors Bldg., Suite 401, 3919
 John R St., Detroit
 Lasichak, Andrew G.....908 Kales Bldg., Detroit
 Lasley, James William.....1026 Maccabees Bldg., Detroit 2
 Lathrop, Philip L.....618 Gladstone, Detroit 2
 Latimer, F. R.....1206 Mutual Bldg., Detroit 26
 Latteier, K. K.....10 Peterboro, Detroit 1
 Lauppe, Edward H.....1650 David Whitney Bldg.,
 Detroit 26
 Lauppe, Frederick A.....1801 David Whitney Bldg.,
 Detroit 26
 Laupus, W. E.....25750 Outer Dr., Lincoln Park
 Laurisin, Eugene.....9545 Grand River Ave., Detroit
 Lawhead, N. R.....7348 Kercheval, Detroit 14
 Lawrence, L. F.....17300 Schaefer, Detroit 35
 Lawson, John W.....18456 Grand River Ave., Detroit 23
 Lazar, Morton R.....7401 Third Ave., Detroit 2
 Leach, David.....865 Fisher Bldg., Detroit 2
 Leach, R. B.....1401 Rivard St., Detroit 7
 Leacock, R. C.....10619 E. Jefferson, Detroit
 Leader, Luther R.....1129 David Whitney Bldg.,
 Detroit 26
 Leaver, L. Ross.....757 Lakewood, Detroit 15
 Lebamoff, Alexander T.....6586 Allen, Allen Park
 Lechner, M. S.....15074 Houston-Whittier, Detroit 5
 Leckie, George C.....1355 David Whitney Bldg.,
 Detroit 26
 Lecklider, A. F. (R).....848 Berkshire Rd.,
 Grosse Pointe 30
 Lee, Harry E.....13616 Gratiot Ave., Detroit 5
 Leibinger, Henry R.....511 Barrington Rd., Grosse Pointe
 Leipsitz, Louis S.....3566 Cass, Detroit 1
 Leiter, Forrest C.....22375 W. Garrison, Dearborn
 Leithauser, D. J.....2717 Yacht Club Dr., Coral Ridge,
 Fort Lauderdale, Fla.
 Leland, Sol.....6563 Grand River, Detroit 8
 Lemley, Clark F.....553 Fisher Bldg., Detroit 2
 Lemmer, J. A., Jr.....9300 Mack Ave., Detroit
 Lemmon, Charles E.....1337 David Whitney Bldg.,
 Detroit 26
 Lemon, Bruce K.....1202 Maccabees Bldg., Detroit 2
 Lentine, J. J.....15831 Mack Ave., Detroit 24
 Lenz, Willard R.....418 Moran Rd., Grosse Pointe 30
 Lepard, C. W.....1025 David Whitney Bldg., Detroit 26
 Lepley, Fred O.....13302 Kercheval, Detroit 15
 Lerman, Samuel I.....4400 Livernois, Detroit
 Lerner, L. H.....16901 W. McNichols, Detroit 35
 Lesesne, J. M.....17700 Mack Ave., Grosse Pointe
 L'Esperance, Simon P. (R).....Route 3,
 Woodslee, Ontario, Can.
 Lessem, David.....19945 Prevost, Detroit 19
 Leszynski, J. S.....517 Professional Bldg., Peterboro and
 Woodward, Detroit 1
 Leucutia, Traian.....10 Peterboro, Detroit
 Levagood, Floyd B.....10 Peterboro, Detroit
 Levant, Arthur B.....15715 E. Warren, Detroit
 Levenson, M. L.....24554 Van Rensselaer, Oak Park
 Leventer, Ira.....2950 South Fort St., Detroit 17
 Levin, D. M.....15121 W. McNichols, Detroit 35
 Levin, Herbert G.....17300 Schaefer, Detroit
 Levin, Michael M.....616 Maccabees Bldg., Detroit
 Levin, Samuel J.....469 Fisher Bldg., Detroit 2
 Levine, E. E.....8233 W. Chicago, Detroit 4
 Levine, S. S.....8233 W. Chicago, Detroit
 Levitt, E. J.....5057 Woodward Ave., Detroit 2
 Levitt, Irving.....19214 Santa Barbara, Detroit
 Levitt, Nathan.....607 Kales Bldg., Detroit
 Levy, David B.....17320 Livernois, Detroit 21
 Levy, Elizabeth H.....1800 Tuxedo, Detroit 6
 Levy, Marvin B.....13906 Woodward, Detroit 3
 Levy, S. H.....7441 W. Seven Mile Rd., Detroit 21
 Lewin, Harry.....2457 Woodward Ave., Suite 702,
 Detroit 1
 Lewis, B. M.....1401 Rivard, Detroit 7
 Lewis, Charles T.....5050 Joy Rd., Detroit 4
 Lewis, Hallet A.....No Address
 Lewis, J. Hugh.....2956 Biddle, Wyandotte
 Lewis, L. A.....2730 E. Jefferson, Detroit 7
 Lewis, W. J.....527 Professional Bldg., Detroit 1
 Libbrecht, Robert V.....6540 Park, Allen Park
 Lichter, M. L.....2900 Oakwood, Melvindale 25
 Lichtwardt, Hartman A.....432 Hancock Ave. E., Detroit
 Liddicoat, A. G.....20125 Fenkell, Detroit 23
 Lieberman, B. L.....19212 Woodward Ave., Detroit
 Lightbody, James J.....501 David Whitney Bldg.,
 Detroit 26
 Lignell, Rudolph W.....16259 James Couzens Hwy.,
 Detroit
 Lilly, C. J.....16649 Princeton, Detroit 21
 Linkner, Leonard S.....738 Maccabees Bldg., Detroit 2
 Lipinski, Stanley L.....7540 Michigan Ave., Detroit 10
 Lipkin, Ezra.....5715 Michigan Ave., Detroit 10
 Lipnik, C. E.....31619 Plymouth, Livonia
 Lipnik, M. J.....15439 Harper, Detroit 24
 Lipschutz, Louis S.....1214 Griswold, Detroit 26
 Lipson, C. T.....18700 Woodingham Ave., Detroit 26
 Lipson, Madeleine L.....7401 Third Ave., Detroit 2
 Lipton, Raymond F.....10 Peterboro, Detroit 1
 Litsky, Abraham D.....1183 E. Grand Blvd., Detroit 11
 Little, James W.....Mt. Carmel Mercy Hospital, Detroit
 Livingood, Clarence.....Henry Ford Hospital, Detroit 2
 Lockwood, Bruce C.....723 David Whitney Bldg.,
 Detroit 26
 Lofstrom, James E.....1420 St. Antoine, Detroit 26
 London, Sol.....987 E. Jefferson, Detroit 7
 Long, Earle C.....2626 Rochester, Detroit 6
 Long, John J.....12421 Monica, Detroit 4
 Longo, Salvatore.....Bon Secours Hospital, 468 Cadieux,
 Detroit 30
 Lookanoff, Victor A.....Highland Park General Hospital,
 Detroit 3
 Loranger, C. B.....20825 Mack, Detroit
 Loranger, G. L.....34 Moross Rd.,
 Grosse Pointe Farms 36
 Lorber, J. H.....16558 Northlawn Ave., Detroit 21
 Lorentzen, Edwin H.....11702 Grand River, Detroit 4
 Lovas, W. S.....6354 W. Fort, Detroit 9
 Love, W. Thomas.....231 E. Warren, Detroit 1
 Lowe, Adolf W.....17117 Parkside, Detroit 21
 Lowe, Townsend G.....9430 Oakland, Detroit 11
 Lowrie, William L., Jr.....Henry Ford Hospital, Detroit 2
 Lowry, George L.....11601 E. Jefferson, Detroit 14
 Lublin, Anna.....18412 Mack Ave., Detroit 24
 Luby, E. D.....20138 Warrington, Detroit 2
 Lukas, John R.....19212 W. Warren, Detroit 28
 Lumpkin, John G., Jr.....243 East Warren, Detroit
 Lutes, B. B.....944 Maccabees Bldg., Detroit 2
 Lutz, Earl F.....13-204 General Motors Bldg., Detroit 2

Lutz, S. J.....15121 W. McNichols Rd., Detroit
 Luzadre, J. H.....18101 E. Warren Ave., Detroit 24
 Lynn, David H.....25759 West Outer Dr., Lincoln Park
 Lynn, Harvey D.....2900 South Fort St., Detroit 25
 Lyons, William Harrington.....1012 Kales Bldg.,
 Detroit 26
 Lytle, Robert P.....411 Professional Bldg., Detroit 1
 Maben, Hayward C., Jr.....9342 Oakland, Detroit 11
 Mabley, J. Donald.....1139 David Whitney Bldg.,
 Detroit 26
 MacArthur, Robert A. (A).....95 Martin Place, Detroit 1
 MacCracken, Frances L.....3752 Gladstone, Detroit 6
 MacDougall, O. P.....13700 Woodward, Detroit
 MacFarlane, Howard W.....1105 David Whitney Bldg.,
 Detroit 26
 MacGregor, William W. (L).....6320 West Surrey
 Foxcroft, Birmingham
 Mack, Harold C.....955 Fisher Bldg., Detroit 2
 MacKenzie, Earle D.....81 E. Kirby, Detroit
 MacKenzie, Edward P.....430 University Place,
 Grosse Pointe
 MacKenzie, Frank M. (R).....Box 326, c/o Mr. Timo
 Sarnia, Ontario, Can.
 MacKenzie, John W.....289 Rivard Blvd.,
 Grosse Pointe 30
 Mackersie, W. G.....18205 Roselawn, Detroit 21
 MacLeod, Charles.....16116 W. McNichols Rd., Detroit 35
 MacMillan, Francis B.....920 David Whitney Bldg.,
 Detroit 26
 MacPherson, K. C.....8100 E. Jefferson, Detroit 2
 MacQueen, Malcolm D.....1654-1st National Bank Bldg.,
 Detroit 26
 Maczewski, John E.....9535 Jos. Campau, Detroit 12
 Maddock, W. O. (M).....Wayne Univ. Col. of Medicine,
 Detroit
 Magnell, Ralph C.....8825 Puritan, Detroit
 Maguire, Clarence E.....536 David Whitney Bldg.,
 Detroit 26
 Mahlin, M. S.....95 Martin Place, Detroit 1
 Mahoney, Hugh M.....214 David Whitney Bldg., Detroit
 Maibauer, Frederick P.....2966 Biddle, Wyandotte
 Maino, Linus J.....2501 W. Grand Blvd., Detroit 8
 Mainwaring, Rosser L.....1910 Russell, Dearborn
 Maire, Edward D.....15224 E. Jefferson, Grosse Pointe
 Maitland, Ruth J.....Mich. Bell Telephone Co., Detroit
 Majzoub, Ahmad J.....3334 Fort St., Lincoln Park
 Malachowski, B. T.....2501 W. Grand Blvd., Detroit 8
 Malik, Nur M.....Holy Family Hospital
 Rawalpindi, Pakistan, India
 Malina, Stephen.....1601 Kirkway Rd., R.F.D. 3, Pontiac
 Malone, J. M.....17300 Schaefer Rd., Detroit 35
 Malone, Richard S. (M).....7424th USAF Hospital,
 APO 132, New York, N. Y.
 Maloney, John A.....1338 Maccabees Bldg., Detroit 2
 Maltzer, Joseph H.....950 E. State Fair, Detroit 3
 Mancuso, Vincent S.....962 E. Grand Blvd., Detroit 7
 Mandiberg, Jack N.....12700 W. 7 Mile Rd., Detroit
 Mann, Andrew D.....16715 Harper, Detroit 24
 Manning, Morey H.....950 E. State Fair, Detroit
 Manson, Gordon.....2799 W. Grand Blvd., Detroit
 Manz, Howard N. (A).....Highland Park Gen'l Hospital,
 Detroit 3
 Mapletoft, Kenneth E.....420 Mohawk, Dearborn
 Marcotte, Oliver J.....2890 W. Grand Blvd., Detroit 2
 Marecki, V. J.....7068 Michigan Ave., Detroit 10
 Margules, S. Z.....3605 Third, Detroit 1
 Margulis, R. R.....566 Fisher Bldg., Detroit 2
 Marinus, Carleton J.....303 David Whitney Bldg.,
 Detroit 26
 Mark, Jerome.....903 Kales Bldg., Detroit 26
 Mark, Jerome, A. P.....14853 Michigan Ave., Dearborn
 Markey, Frank R.....14853 Michigan, Dearborn
 Markoe, Rupert C. L.....4102 Brush St., Detroit 1
 Marks, Ben.....902 Industrial Bank Bldg., Detroit 26
 Marks, Bert W.....8250 Lincoln Dr., Huntington Woods
 Marks, Morris H.....8233 W. Chicago, Detroit 4
 Marsh, Alton R.....1218 Maccabees Bldg., Detroit 2
 Marshall, James R.....14528 E. Jefferson, Detroit 15
 Martin, Elbert A. (L).....1151 David Whitney Bldg.,
 Detroit 26
 Martin, J. B., Jr.....449 E. Elizabeth, Detroit 1
 Martin, L. R.....2000 Second Blvd., Detroit 26
 Martin, Peter A.....857 Fisher Bldg., Detroit 2
 Martin, Wilbur C.....7440 W. Jefferson, Detroit 17
 Martineau, P. C.....Fourth Army Medical Lab.,
 Brooke Army Medical Center, Fort Sam Houston, Tex.
 Martinez, Pedro O.....1439 Bagley, Detroit 16
 Martner, Edgar E.....526 Professional Bldg.,
 Woodward at Peterboro, Detroit
 Marwil, T. B.....16965 Hamilton, Highland Park
 Mateer, John G.....Henry Ford Hospital, Detroit 2
 Mattman, Paul E.....1500 Seminole, Detroit 14
 Mattson, Theodore.....3919 John R St., Detroit
 Mauthe, H. G.....9272 Idaho, Livonia
 Maxwell, J. Harvey.....2415 W. Grand Blvd., Detroit 2
 May, Frederick T.....608 Kales Bldg., Detroit 26
 Mayer, E. V. (L).....16525 Woodward Ave., Detroit 3
 Mayer, Willard D.....51 W. Boston Blvd., Detroit
 Maynard, F. M.....6828 Park, Allen Park
 McAlonan, William T.....10 Peterboro, Detroit 1
 McAlpine, Gordon S.....658 Fisher Bldg., Detroit 2
 McBryan, T. J.....Grace Hospital, Detroit 1
 McCadie, James.....13700 Woodward, Detroit 3
 McCandless, Virginia.....15850 E. Warren, Detroit 24
 McCaughey, R. S. (M).....Receiving Hospital, Detroit 26
 McClaughry, R. I.....16526 Princeton St., Detroit 21
 McClelland, Rachel.....33026 Five Mile Rd., Livonia
 McClellan, Robert J., II.....906-8 Michigan Theatre Bldg.,
 Detroit
 McClendon, James J.....503 E. Warren Ave., Detroit 1
 McClintock, J. J.....16151 Schoolcraft, Detroit 27
 McClure, Robert W.....1306 David Whitney Bldg.,
 Detroit 26
 McClure, William (L).....954 Fisher Bldg., Detroit 2
 McColl, Charles W.....2826 Biddle, Wyandotte
 McColl, Clarke M.....Henry Ford Hospital, Detroit 2
 McColl, K. M.....20323 Mack Ave.,
 Grosse Pointe Woods 36
 McCollum, E. B.....761 David Whitney Bldg., Detroit 14
 McCord, Carey P. (L).....University Hospital,
 111 Maternity Bldg., Ann Arbor
 McCormick, Colin C.....13538 Michigan, Dearborn
 McCullough, Lester E.....521 David Whitney Bldg.,
 Detroit 26
 McDonald, Angus L.....13856 Gratiot Ave., Detroit 5
 McDonald, A. W. (L).....15015 Ward, Detroit 27
 McDonald, William G.....15600 Michigan Ave., Dearborn
 McDowell, D. B.....Wayne Co. General Hospital, Eloise
 McEvitt, Wm. G.....1553 Woodward Ave., Room 412,
 Detroit 26
 McFadyen, H. A.....10 Peterboro, Detroit 1
 McGhee, Richard S.....10015 W. Eight Mile Rd.,
 Detroit 21
 McGillicuddy, W. E.....76 W. Adams Ave., Detroit 26
 McGlaughlin, Nicholas D.....2312 Biddle Ave., Wyandotte
 McGough, Joseph M.....18716 Grand River Ave.,
 Detroit 23
 McGuire, John F.....815 Kales Bldg., Detroit 26
 McGuire, M. Ruth.....763 Fisher Bldg., Detroit 21
 McIntosh, R. D.....Ternstedt Div., G.M. Corp.,
 6307 W. Fort St., Detroit 9
 McIntyre, W. B.....1233 Audubon, Detroit 30
 McKean, G. Thomas.....1515 David Whitney Bldg.,
 Detroit 26
 McKean, Richard M.....1515 David Whitney Bldg.,
 Detroit 26
 McKeever, G. E.....5237 Oakman Blvd., Dearborn
 McKenna, Charles J.....14618 E. Seven Mile Rd.,
 Detroit 5
 McKinnon, John D. (A).....106 W. Davison, Detroit 3
 McKnight, Robert E.....10030 W. McNichols Rd.,
 Detroit 21
 McLane, Harriet E.....4350 Oregon, Detroit 4
 McLean, Brita R.....1365 Cass, Detroit 26
 McLean, D. C.....10 Peterboro, Detroit 1

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Norcott, Edith G. S.....16350 Mack Ave., Detroit 24
Northcross, David C.....668 Winder, Detroit 1
Norton, A. B.....1076 Maccabees Bldg., Detroit
Norton, Charles S. (L).....3503 14th St., Detroit 8
Noshay, William C.....Henry Ford Hospital, Detroit 2
Novack, Richard L.....9928 Farmington Rd., Livonia
Novy, R. L.....858 Fisher Bldg., Detroit 2
Nunn, James W.....106 W. Davison, Detroit 3
Nyboer, Jan.....Harper Hosp., Detroit 1
O'Brien, E. J.....307 David Whitney Bldg., Detroit 26
O'Brien, G. M.....2501 West Grand Blvd., Detroit 8
Obushkevich, L. S.....10149 Michigan Ave., Dearborn
O'Connor, Kathryn L.....14301 Grand River Ave.,
Detroit 27
O'Donnell, Charles H.....10 Peterboro, Room 504, Detroit
O'Donnell, D. H.....2501 W. Grand Blvd., Detroit
Oetting, E. M.....8045 E. Jefferson, Detroit 14
O'Hare, W. J.....3000 Schaeffer Hwy., Dearborn
Ohmart, Galen B.....8721 E. Jefferson, Detroit 14
Ohrt, H. F.....285 E. Grand Blvd., Detroit 7
Okun, Milton H.....3261 Sherbourne Road, Detroit 21
Olejniczak, Stanley.....Wayne County Gen'l Hosp., Eloise
Olen, Alex.....13100 Harper, Detroit 13
O'Linn, Francis P.....1055 Fisher Bldg., Detroit 2
Olmsted, G. S.....27305 Southfield Rd., Lathrup Village
Olson, A. M.....Mt. Carmel Mercy Hospital, Detroit 35
Olson, James A.....28 W. Adams, Suite 911, Detroit 26
Oman, Cyrus F.....12608 Wyoming Ave., Detroit 4
Oppenheim, J. M.....1050 Fisher Bldg., Detroit 2
Orecklin, Leo.....914 Maccabees Bldg., Detroit 2
Organ, Fred W. (L).....10304 Woodward Ave., Detroit 2
Ormond, R. S.....1951 Monroe, Dearborn
Ornstein, Charles.....19504 Kelly Road, Detroit 36
O'Rourke, Paul V.....307 David Whitney Bldg.,
Detroit 26
O'Rourke, R. M.....7384 Twelfth St., Detroit 6
O'Shea, W. A., Jr.....600 "B" St., Santa Rosa, California
Osus, Eugene A.....901 David Whitney Bldg., Detroit 26
O'Sullivan, G. S.....14300 W. McNichols, Detroit 35
Otlewski, E. A.....15800 W. McNichols Rd., Detroit 35
Ottaway, John P.....18226 Mack Ave., Grosse Pte.
Owen, Clarence I.....4160 John R. St., Detroit 1
Palmer, Alice E.....3919 John R. St., Detroit 1
Palmer, M. R.....7624 Dexter Blvd., Detroit 3
Palmisano, I. J.....25447 Plymouth Road, Detroit 28
Pangburn, L. E.....7 Avalon, Detroit
Panic, Stephen M.....1001 W. Seven Mile Rd., Detroit 12
Parcells, F. H.....1014 Buckingham Rd., Detroit 30
Parfanowycz, Sophie N.....7012 Michigan Ave., Detroit 10
Paris, Delmo A.....Alexander Blain Hosp., Detroit 7
Park, C. W.....8414 Salem Lane, Dearborn
Parker, B. R.....19149 W. Seven Mile Rd., Detroit 19
Parnell, John W.....1297 Lochmoor Blvd.,
Grosse Pointe Woods 30
Parr, Robert W.....8-265 General Motors Bldg., Detroit 2
Pasternacki, Norbert T.....6203 Chene, Detroit 11
Pauly, L. R.....221-54 A Horace Harding Blvd.,
Bayside 64, New York
Pawlowski, Jerome I.....2009 East Grand, Detroit
Payne, Eugene.....P. O. Box 118, Roosevelt Park Annex,
Detroit 32
Payne, W. A., Jr.....Henry Ford Hospital, Detroit 2
Paysner, Harry A.....13700 Woodward Ave., Detroit 3
Peabody, Charles W.....474 Fisher Bldg., Detroit
Pearce, A. J.....15317 Piedmont, Detroit 23
Pearlman, Jack.....25860 Concord, Huntington Woods
Pearman, C. L. R.....1509 Kales Bldg., Detroit
Pearse, Harry A.....651 Fisher Bldg., Detroit 2
Pearse, W. H.....651 Fisher Bldg., Detroit 2
Peat, A. C.....2201 E. Jefferson, Detroit 7
Pedersen, Herbert E.....861 Monroe Blvd., Dearborn
Peggs, George F.....5419 Livernois, Detroit 10
Penberthy, G. C. (L).....1515 David Whitney Bldg.,
Detroit 26
Pendy, George V.....1808 David Broderick Tower, Detroit
Pendy, John M.....1401 David Whitney Bldg., Detroit 26
Pensler, Leslie.....8844 Joy Road, Detroit
Pensler, Meyer M.....8844 Joy Road, Detroit
Pequegnot, Charles F. (L).....6283 W. Outer Drive,
Detroit 21
Percy, D. F.....106 W. Davison, Highland Park 3
Perdue, Grace M.....762-63 Fisher Bldg., Detroit 2
Perkin, Frank S.....773 Fisher Bldg., Detroit 2
Perlis, H. L.....1036 Maccabees Bldg., Detroit 2
Perlis, M. S.....952 Maccabees Bldg., Detroit 2
Perrin, E. V. (A).....4305 Russell Ave., Mt. Rainer,
Maryland
Perry, E. T.....3027 David Stott Bldg., Detroit 26
Peterman, Earl A.....13700 Woodward, Detroit 3
Peters, Wm. R.....12400 E. Seven Mile Road, Detroit 5
Peterson, R. A.....11445 Harrison, Livonia
Petix, Samuel C.....19207 Schaefer, Detroit 21
Petoskey, Edward A.....6004 West Fort, Detroit 9
Petrick, T. J.....1221 Lincoln Rd., Lincoln Park
Petrini, M. A.....1067 Fisher Bldg., Detroit 2
Petty, Thomas A.....1204 Yorkshire, Grosse Pointe Park
Peven, Philip S.....18709 Meyers Road, Detroit 21
Pevin, Pauline.....18709 Meyers Rd., Detroit 21
Pfeiffer, Rudolph L. (L).....469 E. Grand Blvd., Detroit 7
Phillips, B. E.....7600 John R. St., Detroit 2
Picard, J. D.....5237 Oakman Blvd., Dearborn
Piccone, Louisa.....10605 W. Warren, East Dearborn
Pichette, J. W.....15146 Michigan Ave., Dearborn
Pickard, Orlando W.....952 Fisher Bldg., Detroit 2
Pietraszewski, A. W.....10338 Jos. Campau, Detroit 12
Pinckard, Karl G.....932 Mason St., Dearborn
Pingel, J. F.....998 Norfolk, Birmingham
Pink, Rose M.....11413 Jos. Campau, Detroit
Pinney, L. J. (L).....28 W. Adams Ave., Detroit
Pino, Ralph H.....208 David Whitney Bldg., Detroit 26
Piper, Ralph R.....1530 McKinstry Ave., Detroit 7
Pittman, J. E.....1613 David Whitney Bldg., Detroit 26
Platz, Carol K.....11368 Kelly Road, Detroit
Plavnick, H. M.....13300 Fenkell, Detroit 27
Pliskow, Harold.....10730 W. Seven Mile Road, Detroit 21
Plonick, Harold.....17554 Indiana, Detroit 21
Plous, E. K.....1030 Fisher Bldg., Detroit 2
Podolsky, Harold M.....2785 S. Fort, Detroit 25
Poirier, Ralph A.....1405 Mutual Bldg., Detroit 26
Polentz, Charles P.....10 Peterboro Detroit 1
Pollack, John J.....18200 Wyoming Ave., Detroit 21
Pollens, L. S.....12730 W. McNichols Rd., Detroit 35
Ponka, Joseph L.....Henry Ford Hospital, Detroit 2
Pool, Walter D.....2091 Moross Road, Detroit
Poos, Edgar E.....554 Fisher Bldg., Detroit 2
Porretta, Anthony C.....11146 Grotiot, Detroit 5
Porretta, F. S.....1076 Maccabees Bldg., Detroit 2
Porter, F. G.....14001 Greenfield, Detroit 27
Porter, Howard J. (R).....36911 Goddard Road, Romulus
Portnoy, Harry.....4253 Leslie, Detroit
Posch, J. L.....1410 Kales Bldg., Detroit
Posner, Irving.....20211 Greenfield Rd., Detroit 35
Potts, E. B.....8943 12th St., Detroit 6
Pratt, Jean P. (L).....18910 Fairway Drive, Detroit 21
Pratt, Lawrence A.....Doctors Bldg., Suite 800,
3919 John R. St., Detroit
Prendergast, J. J. (A).....Box 756 W, Sarasota, Florida
Prescod, H. J.....8943 12th St., Detroit
Preston, Ruth E.....566 Fisher Bldg., Detroit 2
Price, Alvin Edwin.....313 David Whitney Bldg., Detroit
Price, A. Hazen.....62 W. Kirby, Detroit 2
Priest, R. J.....Henry Ford Hospital, Detroit
Prince, A. E.....18060 Conant, Detroit 34
Prisbe, Edward J.....16603 Plymouth Road, Detroit 27
Priver, Julien.....6741 W. Outer Drive, Detroit 35
Procaïlo, A. B.....29901 Ford Road, Garden City
Proctor, Bruce.....1229 David Whitney Bldg., Detroit 26
Proud, Robert H.....26151 Huron River Drive, Flat Rock
Proud, R. F.....26151 Huron River Drive, Flat Rock
Prust, Frank W.....1536 David Whitney Bldg., Detroit 26
Pugh, Howard C.....1729 David Whitney Bldg., Detroit 26
Pugliesi, Benedetto.....9489 E. Outer Drive, Detroit 5
Purcell, Frank H.....1808 David Broderick Tower,
Detroit 26

Puro, H. E.....2900 S. Fort St., Detroit 17
Purves, William H. L.....1767 Guardian Bldg., Detroit 26
Quigley, E. H.....2051 Monroe, Dearborn
Quigley, William.....742 Maccabees Bldg., Detroit
Quinn, Edward L.....Henry Ford Hospital, Detroit 2
Rabinovitch, Bella.....4063 Waverly, Apt. 106, Detroit
Rahm, Lambert P.....14411 E. Jefferson, Detroit 19
Raiford, F. P.....681 E. Vernor Hwy., Detroit 1
Raiford, Frank P., Jr.....681 E. Vernor Hwy., Detroit 1
Ralyea, John.....Highland Park Gen'l Hosp.,
Highland Park
Ramsey, R. H.....861 Monroe, Dearborn 8
Randall, David S.....1765 W. Fort St., Lincoln Park
Rapp, S. L.....12323 Kelly Road, Detroit 24
Raskin, Herbert A.....611 Kales Bldg., Detroit 26
Raskin, Morris.....987 E. Jefferson, Detroit
Rastello, Peter B.....30001 Van Dyke, Warren
Rau, Frederick W.....215 Professional Bldg., Detroit
Ravitz, L. A.....987 E. Jefferson, Detroit 7
Ray, K. J.....2254 22nd St., Wyandotte
Raynor, H. F.....49 Virginia Park, Detroit 2
Rebuck, John W.....Henry Ford Hospital, Detroit
Redding, Lowell G.....1336 Southfield, Lincoln Park 25
Reder, Ben.....20731 Evergreen, Detroit 19
Redfern, William E.....Henry Ford Hospital, Detroit 2
Reed, Everett Hobart (A).....4034 Webb, Detroit
Reed, H. Walter.....8150 Grand River Ave., Detroit 4
Reed, Ivor E.....305 David Whitney Bldg., Detroit 26
Reed, Joseph O., Jr.....448 Lincoln, Grosse Pointe 30
Rees, Howard C.....15700 Mack Ave., Detroit 24
Reichling, R. J., Jr., (A).....18514 Mack,
Grosse Pointe Farms 30
Reid, John Gilbert.....1337 David Whitney Bldg.,
Detroit 26
Reid, Wesley G.....974 Fisher Bldg., Detroit 2
Reiff, Morris V.....10241 Joy Road, Detroit
Reinbolt, Charles A. (L).....33570 Quaker Valley Road,
Farmington
Reiners, C. R.....24250 Kipling, Oak Park
Reinsh, Ernest R.....18674 Muirland Ave., Detroit
Reisig, R. O.....93 Kercheval, Detroit 36
Reisman, N. J.....15344 W. McNichols, Detroit 35
Reisman, S. G.....1078 Maccabees Bldg., Detroit
Reive, David L.....24401 Plymouth, Detroit 28
Rennell, Leo P.....2567 West Grand Blvd., Detroit 8
Reno, G. L.....970 Fisher Bldg., Detroit 2
Rentenbach, R. F.....314 David Whitney Bldg., Detroit 26
Reveno, William S.....958 Fisher Bldg., Detroit 2
Reynor, C. E.....515 Professional Bldg., Detroit 1
Reynolds, Lawrence.....10 Peterboro St., Detroit 1
Reynolds, R. P.....858 Fisher Bldg., Detroit 2
Rezanka, H. J.....952 Westchester Road, Grosse Pointe 30
Rhoades, Francis P.....970 Maccabees Bldg., Detroit 2
Rice, Harold B.....10 Peterboro, Detroit 1
Rice, Meshel.....533 Coats Rd., Oxford
Richardson, Allan L. (R).....Naubinway
Richardson, Robert P.....3714 Monroe, Wayne
Richardson, R. P.....25622 Coolidge Hwy.,
Huntington Woods
Rick, Paul J.....4227 Mt. Elliott, Detroit 7
Ridge, Ralph W. (L).....100 Oak St., Wyandotte
Rieckoff, George G.....14905 E. Jefferson Ave., Detroit 15
Rieden, J. A.....18053 Muirland, Detroit 21
Rieger, John B. (L).....1265 David Whitney Bldg.,
Detroit 26
Rieger, Mary H.....746 Pallister, Detroit
Riethmiller, R. F.....12444 E. Seven Mile Road, Detroit
Rinkel, Robert W.....6586 Allen Road, Allen Park
Riseborough, E. C.....90 E. Warren, Detroit 1
Ritter, George.....15801 W. McNichols, Detroit 35
Rizzo, Paul.....14874 Seymour, Detroit 5
Robb, Edward L.....17380 Livernois, Detroit
Robb, Herbert F.....381 S. Main St., Belleville
Robb, James M. (L).....633 David Whitney Bldg.,
Detroit 26
Roberts, Arthur J.....1310 Warwick, Lincoln Park
Robins, Samuel C.....18963 Jas. Couzens Hwy., Detroit 21

Robinson, Howard.....953 Fisher Bldg., Detroit
Robinson, H. A.....10040 Yellowstone Ave., Detroit 4
Robinson, J. H., Jr.....1553 W. Grand Blvd., Detroit 8
Robinson, R. G.....3751 31st St., Detroit 10
Roeglin, O. F.....18412 Mack Ave.,
Grosse Pointe Farms 30
Rogers, Aaron Z.....20451 Mack Ave., Grosse Pointe Woods
Rogers, George E. B.....2108 David Broderick Tower,
Detroit 26
Rogers, James D.....2966 Biddle Ave., Wyandotte
Rogers, J. T.....16921 James Couzens Hwy., Detroit 19
Rogin, James R.....3027 David Stott Bldg., Detroit 26
Rogoff, Abraham S.....676 Maccabees Bldg., Detroit 2
Rohde, Paul C. (L).....12282 E. Outer Drive, Detroit 24
Rom, Jack.....8600 W. McNichols Road, Detroit 35
Roman, Stanley J.....15020 Michigan Ave., Dearborn
Ronayne, J. J.....16116 W. McNichols Road, Detroit
Rosen, Eugene H.....17187 Schaefer Hwy., Detroit
Rosbolt, Oscar P.....8505 Plymouth Road, Detroit 4
Rosefield, John L.....65 W. Hancock, Detroit 1
Rosen, Harold M.....8620 W. McNichols, Detroit 21
Rosen, T. S.....19350 Monte Vista, Detroit 21
Rosenbaum, Herbert.....19776 Snowden Ave., Detroit 35
Rosenbloom, A. B.....310 E. Jefferson, Detroit 31
Rosenthal, Louis H.....15401 W. McNichols Rd., Detroit
Rosenthal, Samuel A.....16350 Hamilton, Detroit 3
Rosenwach, F. F.....19149 W. 7 Mile Road, Detroit 19
Rosenzweig, Saul R.....2114 David Broderick Tower,
Detroit 26
Ross, B. C.....4493 14th St., Detroit
Ross, Donald G.....722 Notre Dame Ave., Grosse Pointe
Ross, Hyman.....19149 Joy Road, Detroit 28
Rotarius, E. M.....1030 S. Brys Dr.,
Grosse Pointe Woods 36
Roth, Edward T.....640 E. Grand Blvd., Detroit 7
Roth, Theodore I.....60 W. Hancock, Detroit
Rothbart, Harold B.....25622 Coolidge Hwy.,
Huntington Woods
Rothman, Emil D.....19467 Livernois, Detroit 21
Rothwell, W. S.....2900 S. Fort St., Detroit 17
Rottenberg, C. M. J.....13419 Fenkell, Detroit 27
Rottenberg, Leon.....13419 Fenkell, Detroit 27
Rourke, R. F.....4350 Haverhill, Detroit 24
Rowda, Michael S.....2001 E. Grand Blvd., Detroit 11
Rowe, J. J., Jr.....29901 Ford Road, Garden City
Royer, R. R.....16840 E. Warren Ave., Detroit 24
Rucker, Julian J.....668 Farnsworth Ave., Detroit 2
Ruedemann, A. D.....1018 Three Mile Drive, Detroit 30
Ruedemann, A. D., Jr.....242 Lewiston Rd., Detroit 36
Rueger, Milton J.....717 David Whitney Bldg., Detroit 26
Rueger, Ralph C.....9149 E. Jefferson, Detroit 14
Runge, Edward F.....25449 Rouge River Dr., Dearborn
Rupe, C. E.....Henry Ford Hospital, Detroit 2
Rupp, Jacob R.....8054 W. Fort St., Detroit 9
Rupprecht, Emil F.....5525 W. Chicago Blvd., Detroit
Ruskin, Samuel H.....1306 David Broderick Tower,
Detroit 26
Russell, H. N., Jr.....1221 Lincoln, Lincoln Park
Rutzen, Arthur C.....771 Fisher Bldg., Detroit 2
Ryan, James M.....19207 Schaefer Road, Detroit 35
Ryan, W. D. (R).....P. O. Box 4335, Porter Station,
Detroit 9
Rydzewski, Jos. B.....12170 Jos. Campu, Detroit 12
Sack, Anthony G.....2567 W. Grand Blvd., Detroit 8
Sa'di, Lutfi M.....525 Professional Bldg., Detroit 1
Sadler, Henry H., Jr.....15 Kercheval, Detroit
Sadzikowski, Joseph T.....29901 Ford Rd., Garden City
Sage, Bernard A.....1013 Haigh, Dearborn
Sage, Edward O. (L).....415 Burns Drive, Detroit
Sage, Thomas.....7815 E. Jefferson, Detroit 14
Sager, Edward L.....13902 Gratiot Ave., Detroit 5
St. Amour, Hector J.....20120 Renfrew, Detroit 21
St. Louis, R. J.....10909 W. Jefferson, River Rouge 18
Sakorraphos, Stelios N.....1346 Broadway, Detroit 26
Sakwa, Saul.....19467 Livernois, Detroit 21
Salan, L. J.....995 S. Main St., Plymouth

Salchow, Paul T.....Med. Dir., Herman Kiefer Hospital,
Detroit

Salisbury, Carolyn S.....527 Professional Bldg., Detroit

Salowich, John N.....15235 Harrison, Allen Park

Saltstein, Harry C.....966 Fisher Bldg., Detroit 2

Samborski, Anne H.....Northville State Hospital,
Northville

Sand, Harry H.....24110 Oxford, Dearborn

Sander, F. V., Jr.....344 Glendale, Highland Park

Sander, Irvin W.....5050 Cass Ave., Detroit 2

Sanders, Alex W.....920 Maccabees Bldg., Detroit 2

Sanderson, Alvord R.....978 Pemberton Road,
Grosse Pointe Park

Sanderson, Susanne M. (L).....The Shelton Hotel,
15 E. Kirby, Detroit

Sandler, Nathaniel.....1004 Kales Bldg., Detroit 26

Sandweiss, D. J.....15201 W. McNichols Rd., Detroit 35

Sapala, M. Andrew.....460 Fisher Bldg., Detroit

Saraf, L. B.....14540 E. Warren, Detroit

Sargent, D. A.....Detroit Receiving Hospital, Detroit 26

Sargent, Richard C.....17357 Fenkell Ave., Detroit 27

Sargent, William R.....17357 Fenkell Ave., Detroit 27

Sauber, B. J.....14500 Rutland, Detroit 27

Sauk, John J.....302 W. McNichols Rd., Detroit

Savignac, Eugene M.....4777 E. Outer Drive, Detroit 12

Scarney, Herman D.....573 Fisher Bldg., Detroit 2

Schaefer, R. L., Jr.....1204 Kales Bldg., Detroit 26

Schaefer, R. L.....1204 Kales Bldg., Detroit 26

Schaeffer, Martin.....10720 W. Seven Mile Rd., Detroit 21

Schane, David.....17157 Mendota, Detroit 21

Scheinberg, Schayel.....966 Fisher Bldg., Detroit

Schembeck, I. S.....1655 David Whitney Bldg., Detroit 26

Schiff, D. W. (A).....5715 S. Cherokee, Littleton, Colorado

Schiller, A. E.....1737 David Whitney Bldg., Detroit

Schillinger, Harold K.....4838 Neckel, Dearborn

Schimek, R. A.....Henry Ford Hospital, Detroit 2

Schirack, R. D. (A).....Luzerne

Schkloven, Norman.....20051 Warrington, Detroit 21

Schlafer, Nathan H.....1806 David Broderick Tower,
Detroit 26

Schlemer, John H. (A).....13826 Dexter Blvd., Detroit 6

Schlesinger, Henry.....13534 Woodward, Detroit 3

Schmaltz, John D.....1701 David Whitney Bldg., Detroit

Schmidt, G. F.....1074 Vernier Road,
Grosse Pointe Woods 36

Schmidt, Harry E.....667 Fisher Bldg., Detroit 2

Schmidt, Milton R.....2615 W. Jefferson, Trenton

Schmidt, Werner F.....1807 Stroh Bldg., Detroit

Schmier, Burton L.....5440 Cass, Detroit 2

Schmitt, Norman L.....10127 W. McNichols, Detroit 21

Schneck, R. J.....641 David Whitney Bldg., Detroit 26

Schneider, Charles L.....22148 Michigan Ave., Dearborn

Schneider, Curt P.....655 Fisher Bldg., Detroit 2

Schoenfield, G. D.....8830 W. McNichols Road, Detroit 21

Schooten, Sarah S.....13700 Woodward Ave.,
Highland Park 3

Schorling, Otis W.....Detroit Memorial Hospital,
Detroit 26

Schorr, Robert L. (L).....1325 E. Jefferson, Detroit 7

Schreiber, Frederic.....10 Peterboro, Detroit 1

Schroeder, Carlisle F.....7815 E. Jefferson, Detroit

Schuknecht, Harold F.....Henry Ford Hospital, Detroit 2

Schulte, Carl H.....808 Mutual Bldg., Detroit 26

Schultz, C. H.....19353 Carlyle, Dearborn

Schultz, E. C., Jr.....20172 Sheffield, Detroit 21

Schultz, Ernest C.....840 David Whitney Bldg., Detroit 26

Schuster, Benjamin.....1800 Tuxedo, Detroit 6

Schwartz, Ben.....275 W. Grand Blvd., Detroit 16

Schwartz, H. A.....7605 Puritan, Detroit 21

Schwartz, Louis A.....861 Fisher Bldg., Detroit 2

Schwartz, Oscar D.....7441 West Seven Mile Road,
Detroit

Schwartzberg, Jos. A.....19445 Plymouth, Detroit

Schweigert, C. F.....10627 Cadieux, Detroit 24

Schwocho, N. H.....6525 Park, Allen Park

Sciarrino, Stanley V.....15388 Livernois, Detroit 21

Scott, Marrior U.....79 Kercheval, Detroit 36

Scott, R. J.....7333 W. 7 Mile Road, Detroit 21

Scott, William J.....79 Kercheval, Grosse Pointe 36

Seabrooks, B. F., Jr.....9136 Oakland Ave., Detroit

Secord, Eugene W.....18980 Wyoming, Detroit 21

Seeley, James B.....5460 Shaefer Rd., Dearborn 2

Seeley, Ward F.....1807 David Whitney Bldg., Detroit 26

Segar, Laurence F.....1410 David Broderick Tower,
Detroit 26

Segel, N. P.....2116 David Stott Bldg., Detroit 26

Seibert, Alvin H. (L).....1180 Bedford Road,
Grosse Pointe Park 30

Seiferlein, A. L.....508 David Whitney Bldg., Detroit 26

Self, William G.....20861 Mack Ave.,
Grosse Pointe Woods 36

Seligson, Alvin.....1505 Norris Ave., Bronx 57, New York

Sellers, Charles W.....2314 W. Grand Blvd., Detroit 8

Sellers, Graham A.....10535 W. Seven Mile Road,
Detroit 21

Seltzer, Joseph.....10300 W. Seven Mile Road, Detroit 21

Serrester, Bernard F.....18650 W. Warren, Detroit 10

Seski, Arthur G.....863 Fisher Bldg., Detroit 2

Sewell, George.....1116 David Whitney Bldg., Detroit 26

Sewell, Guy W.....16321 Mack Ave., Detroit 24

Shada, J. C.....17830 East Warren, Detroit 24

Shafarman, Eugene M.....5320 John R. St., Detroit 2

Shaffer, Jos. H.....2799 W. Grand Blvd., Detroit 2

Shaffer, Loren W.....528 Neff Lane, Grosse Pointe 30

Shafter, Royce R.....655 Fisher Bldg., Detroit 2

Shanoski, Stanley J.....728 Maccabees Bldg., Detroit 2

Shapiro, I. Allen.....4400 Livernois, Detroit 21

Shapiro, Jacob.....15085 E. Seven Mile Rd., Detroit

Shapiro, Reuben I.....636 Maccabees Bldg., Detroit

Shargel, G. M. J.....1800 Tuxedo, Detroit 6

Sharp, Elwood.....633 Neff Rd., Grosse Pointe 30

Sharpe, William D.....1402 Amber Crescent,
Oakville, Ontario, Canada

Sharrer, Charles H.....16840 E. Warren, Detroit 24

Shekerjian, Armen (M).....1500 Kings Road,
Leesville, Louisiana

Shelden, Warren E.....14215 W. McNichols Road, Detroit

Sheldon, J. A. (L).....1435 Three Mile Drive,
Grosse Pointe Park 30

Shelton, C. F.....910 David Broderick Tower, Detroit 26

Sheppard, Emma L. W. (R).....7245 Engleman Ave.,
Centerline

Sherman, Marvin.....15140 Miller, Oak Park 37

Sherman, William LaRue.....10 Peterboro, Detroit 1

Sherman, Wm. L., Jr., (M).....201 E. Kirby, Detroit 2

Sherrin, E. R.....17555 James Couzens Hwy., Detroit 35

Shewchuk, Alexander P.....7300 Allen Road, Allen Park

Shields, William L.....18600 Woodward, Detroit 3

Shifrin, Peter G.....20211 Greenfield, Detroit 35

Shiovitz, Louis.....5419 Michigan Ave., Detroit 10

Shtipton, W. Harvey (A).....19226 Rockcastle,
Harper Woods

Shlain, Benjamin.....10244 W. 7 Mile Road, Detroit

Shorney, B. T.....714 Lafayette Bldg., Detroit 26

Shors, C. M.....19635 Mack Ave., Detroit 36

Shortz, Gerald.....No Address

Shreve, Alfred J.....10149 Michigan, Dearborn

Shulak, Irving B.....1714 David Broderick Tower,
Detroit 26

Shulman, Herschel A.....1120 Maccabees Bldg., Detroit 2

Shumaker, E. J.....970 Fisher Bldg., Detroit

Siddall, Roger S.....955 Fisher Bldg., Detroit 2

Sieber, Edward H.....15146 Michigan Ave., Dearborn

Siefert, John L.....12645 Gratiot, Detroit 5

Siefert, William A.....17400 Grand River Ave., Detroit 27

Siegel, Henry.....10440 W. 7 Mile Road, Detroit 21

Siero, J. M. (M).....9105 Van Dyke, Detroit 13

Sievers, Lorraine A.....1457 David Whitney Bldg.,
Detroit 26

Sigler, J. W.....Henry Ford Hospital, Detroit 2

Sill, Jacob A.....19635 Mack Ave., Detroit 30

Sillery, R. J.....16927 St. Paul, Grosse Pointe 30

Silverman, I. Z.....9103 Van Dyke, Detroit 13

Silver, I. W.....20000 W. Chicago, Detroit 28

Silverman, Maurice M.....3925 Joy Rd., Detroit 6

Silverman, Max.....2240 W. Grand Blvd., Detroit 8
 Simmons, Donald R.....815 Kales Bldg., Detroit
 Simon, H. G.....5097 Balfour Rd., Detroit 24
 Simpson, G. E.....18101 Warren Ave., Detroit
 Sinclair, James W.....16404 E. Warren, Detroit 24
 Singer, Floyd W.....24441 Emerson, Dearborn
 Sippola, George W.....13603 LaSalle, Detroit 6
 Sisson, John M.....17320 W. McNichols, Detroit 35
 Skinner, John H.....816 David Whitney Bldg., Detroit 26
 Sklar, Manuel.....17300 Schaefer Hwy., Detroit 35
 Sklover, J. I.....1326 E. 7 Mile Rd., Detroit 3
 Skully, Edward J.....13535 Woodward Ave., Detroit 3
 Sladen, F. J. (L).....Henry Ford Hospital, Detroit
 Slahetka, Vincent E.....7435 Michigan, Detroit 10
 Slaughaupt, J. G.....1150 Griswold St., Room 401,
 Detroit 26
 Slaughter, F. M.....455 E. Adams, Detroit 26
 Slavin, Leo W.....7618 Michigan, Detroit 10
 Slazink, John G.....1304 David Broderick Tower,
 Detroit 26
 Sliwin, E. P.....4917 Schaefer, Dearborn
 Slusky, Joseph.....1527 David Stott Bldg., Detroit
 Slutsky, Gilbert.....10720 W. Seven Mile Rd., Detroit 21
 Sly, R. F.....22213 Tenny, Dearborn
 Small, Henry.....11507 Hamilton, Detroit 3
 Small, John.....912 Maccabees Bldg., Detroit 2
 Smathers, H. M.....14219 W. McNichols, Detroit 35
 Smathers, W. M.....14219 W. McNichols Rd., Detroit 35
 Smeck, Arthur R. (L).....1036 Waterman, Detroit 9
 Smith, Clarence M.....2715 S. Schaeffer Hwy., Detroit 17
 Smith, Clarence V.....1716 E. Grand Blvd., Detroit 11
 Smith, Claude A. (L).....7 Adams Lane, Dearborn 2
 Smith, D. H.....1800 Tuxedo, Detroit 6
 Smith, F. J.....369 Wimpleton Dr., Birmingham
 Smith, Henry L.....16401 Grand River Ave., Detroit 27
 Smith, J. Allen.....14140 Puritan, Detroit 27
 Smith, R. F.....Henry Ford Hospital, Detroit 2
 Smith, Richmond W., Jr.....Henry Ford Hosp., Detroit 2
 Smolenski, J. J.....13815 Puritan, Detroit 27
 Smyka, E. J.....6111 Charles, Detroit 12
 Smyka, Stanley M.....716 Kales Bldg., Detroit 26
 Snedeker, Bernard C.....18800 Woodward Ave.,
 Detroit 3
 Snider, J. J. (M).....22699 Van Dyke, Van Dyke
 Snow, L. W.....508 W. Main St., Northville
 Snyder, Arthur M.....13700 Woodward Ave., Suite 503,
 Detroit 3
 Sobel, Robert A.....18980 Wyoming, Detroit 21
 Socal, Charles J.....8500 Mt. Elliott, Detroit 11
 Sokol, William M.....15800 W. McNichols, Detroit 35
 Sokolov, Raymond A.....767 Fisher Bldg., Detroit 2
 Soller, A. S.....15105 W. Seven Mile Road, Detroit 35
 Solomon, A. B.....16636 W. Chicago, Detroit 28
 Sonda, Lewis P.....544 David Whitney Bldg., Detroit 26
 Sorock, Milton L.....19467 Livernois, Detroit 21
 Spademan, Loren C.....1100 North Woodward,
 Birmingham
 Speck, Carlos C.....6525 Park Ave., Allen Park
 Spector, Maurice J.....12504 E. Jefferson, Detroit 15
 Spero, Gerald D.....7330 W. Seven Mile Rd., Detroit 21
 Sperry, Frederick L. (A).....463 Fisher Bldg., Detroit 2
 Spire, R. D.....4160 John R. St., Detroit 1
 Spiro, Adolph S.....11255 Mack Ave., Detroit 15
 Springborn, B. R.....15818 E. Warren, Detroit 24
 Sprunk, Carl J.....2900 Oakland Blvd., Melvindale
 Spurrier, Ethelbert.....1553 Woodward Ave., Detroit 26
 Squires, W. H. (R).....1616 S. 28th Ave.,
 St. Petersburg 5, Florida
 Stafford, Frank W. J.....1111 Griswold, Detroit
 Stalker, Hugh (R).....25 Radner Circle,
 Crosse Pointe Farms 36
 Stamell, B. B.....658 Maccabees Bldg., Detroit
 Stamell, Meyer.....14634 Greenfield, Detroit
 Staniszewski, Casimir.....8581 Pinchurst, Detroit
 Stanton, James M.....1001 Mutual Bldg., Detroit
 Stapleton, Wm. J., Jr. (L).....641 David Whitney Bldg.,
 Detroit 26
 Starkman, Morris.....14624 E. Seven Mile Rd., Detroit 5
 Starrs, Thomas C. (L).....509 Fox Theater Bldg.,
 Detroit 1
 Staryk, Steven E.....1010 N. Oxford,
 Grosse Pointe Woods 36
 Staub, Howard P.....9210 Jerome, Detroit 39
 Staudt, L. W.....Chrysler Corporation, Highland Park 3
 Stearns, A. B.....504 Doctors Bldg., Detroit 1
 Stebbins, Charles E.....856 Fisher Bldg., Detroit
 Stefani, E. L.....18455 James Couzens Hwy., Detroit 35
 Stefani, Raymond T.....13516 Stoepel, Detroit 4
 Steffensen, Ellis H.....Henry Ford Hospital, Detroit
 Stein, Albert H.....19334 San Juan Drive, Detroit 21
 Stein, Emory.....13115 Woodward Ave., Detroit 3
 Stein, James R.....125 W. 9 Mile Road, Ferndale
 Stein, Saul C.....23105 Van Dyke, Van Dyke
 Steinbach, A. L. (M).....2726 Tyler Ave., % H. Woods,
 Ogden, Utah
 Steinbach, Henry B.....411 Lakeland, Crosse Pointe
 Steinberger, Eugene J.....6409 W. Fort St., Detroit 9
 Steiner, Frederick B.....29901 Ford Road, Garden City
 Steiner, Gabriel.....10 Peterboro, Detroit 1
 Steiner, L. J.....12636 Chelsea Ave., Detroit 13
 Steiner, Max.....3044 W. Grand Blvd., Detroit 2
 Steinhardt, Milton J.....10720 W. Seven Mile Road,
 Detroit
 Stellhorn, Chester E.....12900 W. Seven Mile Road,
 Detroit 21
 Stellhorn, Mary Christine.....16616 Mack Ave., Detroit
 Stempel, E. M.....18324 Fairfield, Detroit 21
 Sterba, Richard F.....1130 Parker, Detroit 14
 Sterling, Robert R.....1541 David Whitney Bldg.,
 Detroit 26
 Stern, E. A.....12710 Dexter Blvd., Detroit 38
 Stern, H. L.....14137 Warwick, Detroit 23
 Stern, Julian.....15121 W. McNichols Road, Detroit 35
 Stern, Leonard.....1630 Wellesley Dr., Detroit 3
 Stern, Louis D.....1049 David Whitney Bldg., Detroit
 Stevens, C. H.....10 Peterboro, Detroit 1
 Stevenson, Charles S.....1405 Kales Bldg., Detroit
 Stewart, Lula Belle.....8635 Dexter Blvd., Detroit 6
 Stewart, M. N.....411 Professional Bldg., Detroit
 Stewart, Marjorie R.....25750 Outer Drive, Lincoln Park
 Stewart, R. M.....15357 Farmington Road, Livonia, Mich.
 Stewart, Thomas O.....17187 Schafer Hwy., Detroit 35
 Stiefel, Daniel M.....1563 David Whitney Bldg.,
 Detroit 26
 Stillwater, Karl.....18311 Appoline, Detroit 35
 Stirling, A. M.....10 Peterboro, Detroit 1
 Stith, Dwight E.....505 Owen, Detroit 11
 Stobbe, Godfrey D.....Grace Hospital, Detroit
 Stocker, Lawrence L.....7330 W. Seven Mile Road,
 Detroit 21
 Stocker, Marvin L.....116 North Adams St., Ypsilanti
 Stockwell, B. W.....703 Doctors Bldg., 3919 John R St.,
 Detroit
 Stokfisz, Thaddeus.....7012 Michigan Ave., Detroit 10
 Stoller, Raymond.....25210 Grand River Ave., Detroit 19
 Stone, Julius.....14633 E. Seven Mile, Detroit 5
 Stone, S. L.....14620 E. Seven Mile Road, Detroit 5
 Straith, Claire L.....2605 West Grand Blvd., Detroit 8
 Straith, R. E.....2605 W. Grand Blvd., Detroit 8
 Strand, Martin E.....22400 Cherry Hill, West Dearborn
 Stricker, Henry D.....5624 W. Fort St., Detroit 9
 Strickroot, Fred L.....707 Kales Bldg., Detroit
 Strohschein, D. F.....15800 W. McNichols Rd., Detroit 35
 Strutz, Wm. C.....1553 Woodward Ave., Detroit
 Stryker, Joan C.....2853 Biddle St., Wyandotte
 Stryker, Walter A.....Wyandotte General Hospital,
 Wyandotte
 Stubbs, C. T.....13930 Woodward, Detroit 3
 Stubbs, Harold W.....13930 Woodward, Detroit 3
 Stump, George D.....1314 David Whitney Bldg.,
 Detroit 26
 Suen, Irene T. S.....3675 E. Outer Drive, Detroit 34
 Sugar, David I.....13120 Broadstreet, Detroit
 Sugar, H. Saul.....18140 San Juan Drive, Detroit

Sugarman, Marcus H.....15201 W. McNichols Rd.,
Detroit 35

Sullivan, Hugh A.....1053 David Whitney Bldg.,
Detroit 26

Sultzman, L. C.....474 Fisher Bldg., Detroit 2

Summers, William A.....1613 David Whitney Bldg.,
Detroit 26

Summers, W. S. (L).....402 N. Palmway, Lake Worth

Surbis, John P.....22277 Long Blvd., Dearborn

Sutherland, Jacob M. (L).....662 Fisher Bldg., Detroit 2

Suwinski, Raymond H.....9801 Conant, Detroit 12

Swanson, Carl W.....936 Alter Road, Detroit 15

Swanson, Cleary N. (R).....16921 James Couzens Hwy.,
Detroit 27

Swanson, Robert G.....936 Alter Road, Detroit

Swartz, Fred G., Jr.....1229 David Whitney Bldg., Detroit

Sweeny, Donald N., Jr.....8445 E. Jefferson, Detroit 14

Swihart, J. J.....912 Kales Bldg., Detroit 26

Switzer, Bertrand C. (R).....12246 Ilene, Detroit 4

Szabunia, S. C.....19600 Van Dyke, Detroit 34

Szappanyos, Bela J. (A).....19335 Kentucky, Detroit 21

Szilagyi, D. Emerick.....14638 Stahelin, Detroit 23

Szladek, F. J.....4045 W. Jefferson, Ecorse

Szmigiel, A. J.....7527 E. Seven Mile Road, Detroit 34

Taber, R. E.....Henry Ford Hospital, Detroit 2

Talbot, Frank G.....1365 Cass, Room 1429, Detroit 19

Tallant, Edward J.....14001 Greenfield, Detroit

Talmers, Frederick.....Receiving Hospital, Detroit 26

Tamblyn, E. J.....Bon Secors, 468 Cadieux Road,
Grosse Pointe 30

Tanner, Natalia M.....8033 Twelfth St., Detroit 6

Tapert, Julius C.....888 Chalmers, Detroit 15

Tasker, Helen E.....76 W. Adams, Detroit

Tassie, Ralph N.....14060 Saratoga, Detroit

Tatellis, Gabriel A.....1011 E. Grand Blvd., Detroit

Tatelman, Maurice.....1420 St. Antoine, Detroit 26

Taurence, William H.....1860 Ford, Wyandotte

Taylor, Aaron.....Veterans Hospital, Dearborn

Taylor, Ivan B.....504 Doctor Bldg., 3919 John R St.,
Detroit

Taylor, Nelson M.....722 Notre Dame Ave.,
Grosse Pointe 30

Taylor, W. V.....14727 E. Jefferson, Detroit 15

Tazzioli, Henry A.....21970 Moross Road, Detroit 36

Tear, Malcolm J. J.....5008 Trumbull Ave., Detroit 8

Teitelbaum, Myer.....405 Kales Bldg., Detroit 26

Tenaglia, Thomas A.....9 Salliotte, Ecorse 18

Tenerowicz, Rudolph G.....2925 Lehman, Detroit 12

Teshima, John Y.....18800 Woodward Ave., Detroit 3

Test, Frederick C., II.....310 E. Jefferson, Detroit 31

Texter, Elmer C.....7457 Gratiot Ave., Detroit 13

Thompson, Arthur Lee.....6125 Scotten, Detroit 10

Thompson, H. O.....6014 W. Fort, Detroit 9

Thomson, Daniel C.....18459 Parke Lane, Grosse Ile

Thornell, H. E.....7407 12th St., Detroit 6

Thornton, J. A.....525 Visger, Ecorse

Thosteson, George C.....1139 David Whitney Bldg.,
Detroit 26

Thumann, R. C., Jr.....1757 David Whitney Bldg.,
Detroit

Thumin, Sadie.....15306 Joy Road, Detroit

Ting, Yoeh M.....16024 Stratford Drive, Detroit

Tkaczuk, Dmytro.....10345 Joseph Campau, Detroit 12

Toaz, Robert B.....13700 Woodward, Detroit 3

Tobin, J. S.....2860 Clark St., Detroit

Todoroff, Theodore.....904 S. Military, Dearborn

Tolbert, Vassal G.....3705 Hastings, Detroit 1

Tomsu, Charles L.....6170 Michigan Ave., Detroit 10

Torres, Estelle.....3985 Caniff, Detroit

Torres, Raul.....3985 Caniff, Detroit 12

Tourkow, L. P.....4741 Fullerton, Detroit 38

Tourney, Garfield.....Lafayette Clinic, Detroit 7

Townsend, Frank M.....1551 Trumbull, Detroit 16

Tracey, J. M.....16650 James Couzens Hwy., Detroit 21

Trader, Kenneth N.....951 Fisher Bldg., Detroit 2

Tregenza, W. K.....18530 Grand River, Detroit

Tremain, Harold L.....106 W. Davison, Detroit

Trisler, J. J.....651 Fisher Bldg., Detroit 2

Troester, George A.....1140 Maccabees Bldg., Detroit

Trombino, James F. V.....2567 W. Grand Blvd., Detroit 8

Trombley, Joseph J., Jr.....18595 Grand River Ave.,
Detroit 23

Truba, Paul K.....1409 Kales Bldg., Detroit 26

Trudeau, J. M.....17300 Schaefer, Detroit 35

Trudgen, P. E.....1224 Beechmont, Dearborn

Truszkowski, Edward G.....3411 Evaline, Detroit 12

Tryhall, S. W.....13300 Livernois, Detroit 4

Tulloch, John.....923 David Whitney Bldg., Detroit

Tupper, Roy D.....15101 W. Seven Mile Rd., Detroit 19

Turbett, Claude W. (L).....4230 Commonwealth Ave.,
Detroit 8

Turcotte, V. J. (A).....545 Lakeland, Detroit 30

Turkel, Henry.....1302 Industrial Bank Bldg., Detroit 26

Turnbull, Jack V.....22340 Michigan, Dearborn

Turner, John J.....25447 Plymouth Rd., Detroit

Tuynman, Peter E.....20032 W. McNichols Rd.,
Detroit 19

Ujda, Chester J.....3106 Washington, Wayne

Ulbrich, Henry L. (L).....1540 Torrey Road,
Grosse Pointe Woods 30

Ulmer, A. A.....1989 Broadstone Ave., Grosse Pte. 36

Ulrich, Willis H.....22365 Grand River, Detroit

Umphrey, Clarence E.....15300 W. McNichols Rd.,
Detroit 35

Unkefer, W. T.....15800 W. McNichols Rd., Detroit 35

Usher, William Kay.....15605 Kercheval, Detroit 30

Usndek, H. E.....18485 Mack Ave., Detroit 36

Vaitas, Otonas.....10149 Michigan Ave., Dearborn

Vale, C. Fremont (R).....2615 Via Tuscany,
Winter Park, Florida

Van Arsdale, W. L.....22231 W. Outer Drive, Dearborn

Van Becelaere, L. A.....1860 Ford, Wyandotte

VandenBerg, Henry J., Jr.....816 David Whitney Bldg.,
Detroit 26

Vander, S. A.....918 Maccabees Bldg., Detroit 2

Van Eck, James E.....9165 Whittier, Detroit 24

Van Hoek, Donald E.....2001 Lancaster,
Grosse Pointe Woods 30

Vann, C. H.....15645 Fenkell, Detroit 27

Van Hoey, A. F.....19154 James Couzens Hwy., Detroit 35

Van Raaphorst, L. F.....1306 Kales Bldg., Detroit 26

Van Riper, Steven L.....1490 Iroquois, Detroit 14

Van Slyck, E. J.....2201 E. Jefferson, Detroit 7

Vardon, Edward M.....12897 Woodward Ave., Detroit 3

Vasu, V. O.....4829 Woodward, Detroit 1

Velat, C. A.....Providence Hospital, Detroit 8

Veldhuis, A. H.....Henry Ford Hospital, Detroit 2

Veling, William F.....1060 Fisher Bldg., Detroit 2

Vogel, Hyman A.....29901 Ford Road, Garden City

Vokes, Milton D.....10182 Gratiot Ave., Detroit

Vonder Heide, E. C.....17190 Strathmore, Detroit 21

Vorwald, A. J.....210 McKinley, Grosse Pte., Farms 36

Vossler, A. E.....825 David Whitney Bldg., Detroit 26

Wachtel, Jacob.....Sinai Hospital, Detroit 35

Waddington, Jos. E. G. (L).....3818 Northwestern,
Detroit 6

Waggoner, Lyle G.....404 David Whitney Bldg.,
Detroit 26

Wainger, Max J.....1012 David Broderick Tower,
Detroit 26

Wainstock, Michael A.....1508 David Broderick Tower,
Detroit 26

Wakeman, Everal M.....22276 Garrison, Dearborn

Waldbott, George L.....2930 W. Grand Blvd., Detroit 2

Walker, George L.....10 Peterboro, Detroit 26

Walker, Jesse P.....15510 Mack Ave., Detroit 24

Walker, Roger V.....1255 David Whitney Bldg.,
Detroit 26

Walker, R. V., Jr.....1255 David Whitney Bldg.,
Detroit 26

Walkowiak, Robert G.....716 Kales Bldg., Detroit 26

Wallace, S. Willard.....7815 E. Jefferson, Detroit 14

Wallaert, A. J.....20861 Mack Ave.,
Grosse Pointe Woods 36

Walls, Arch.....17201 W. McNichols Road, Detroit
Walser, Howard Carleton.....566 Fisher Bldg., Detroit 2
Walsh, Francis P.....205 Professional Bldg., Detroit 1
Walter, Arthur W.....14201 Rutland, Detroit 27
Walter, Floyd J.....18714 Grand River, Detroit 23
Waltz, P. J.....16127 Woodward, Highland Park 3
Wangner, William F.....1401 S. Washington Ave.,
Royal Oak
Ward, C. H.....15800 West McNichols Road, Detroit 35
Warner, J. F.....7850 E. Jefferson, Detroit 14
Warner, P. L.....10314 Puritan, Detroit 21
Warren, Irving A.....4100 W. McNichols Road,
Detroit 21
Warren, Max.....20001 Shrewbury, Detroit 21
Warren, Wadsworth.....1144 David Whitney Bldg.,
Detroit 26
Wasserman, Harold.....19642 W. Seven Mile Road,
Detroit 19
Wassermann, Lewis C.....300 W. McNichols Rd., Detroit 3
Waszak, Charles J.....2501 West Grand Blvd., Detroit 8
Watkins, T. W. (M).....137 Schonhardt St., Tiffin
Watson, Douglas J.....15101 Plymouth Rd., Detroit
Watson, Harwood G.....935 S. Military, Dearborn
Watson, J. Edwin.....2536 W. Grand Blvd., Detroit 8
Watts, Frederick B.....16321 Mack, Detroit
Watts, J. C.....7360 Twelfth St., Detroit 6
Watts, Joseph.....17140 Muirland, Detroit 21
Wayne, Morris A.....18474 Roselawn, Detroit 21
Weaver, C. E. (R).....1260 S. E. Fourth Court,
Deerfield Beach, Florida
Weaver, Delmar F.....571 Fisher Bldg., Detroit
Weber, Karl.....18101 E. Warren, Detroit 24
Webster, John E.....840 David Whitney Bldg., Detroit 26
Weed, Milton R.....1997 E. Grand Blvd., Detroit 11
Wehenkel, Albert M. (L).....7356 12th St., Detroit 6
Wehr, M. B.....2900 S. Fort St., Detroit 17
Weidner, J. H.....% Dearborn Engineering Lab.,
21500 Oakwood, Dearborn
Weiner, Maurice B.....20211 Greenfield, Detroit 35
Weingarden, David.....13240 Vassar Drive, Detroit
Weingarten, J. S. (A).....19346 Ohio, Detroit
Weinstein, Jacob.....4237 Grand River Ave., Detroit 8
Weisberg, A. Allen.....20 W. Seven Mile Road., Detroit 3
Weisberg, Harry.....15101 W. McNichols Rd., Detroit 21
Weisberg, Jacob.....15101 W. McNichols Rd., Detroit 35
Weisenthal, Irvin.....5764 Woodward, Detroit 2
Weiser, F. A. (A).....235 Charlevoix, Detroit 36
Weiss, C. F.....20323 Mack Ave., Grosse Pte. Woods
Weiss, Casimer P.....10040 Joseph Campau, Detroit 12
Weiss, J. G. (A).....7740 Third, Detroit 2
Weiss, Morris.....Hawthorn Center, Northville
Welch, John H.....18550 W. Outer Drive, Dearborn 7
Weller, Charles N.....1650 David Whitney Bldg.,
Detroit 26
Wells, H. J.....Wayne County General Hosp., Eloise
Wells, Martha L.....760 Fisher Bldg., Detroit
Weltman, Carl G.....1701 David Whitney Bldg.,
Detroit 26
Wendel, Jacob S. (L).....744 David Whitney Bldg.,
Detroit 26
Wenzel, Jacob F.....1006 Kales Bldg., Detroit 26
Werle, Peter Paul.....1420 St. Antoine, Detroit 26
West, G. A. (M).....3939 Pennsylvania, Detroit
West, Howard G.....12739 Puritan, Detroit 37
West, Malcolm E.....6303 Mack Ave., Detroit 7
Weston, Bernard.....19760 Monte Vista, Detroit 21
Weston, Earl E.....18101 James Couzens Hwy., Detroit 21
Weston, Horace L.....703 Mutual Bldg., Detroit 26
Weston, Jean K.....444 Lodge Drive, Detroit 14
Weyher, Russell F.....5383 Oakman Blvd., Detroit 4
Whalen, Neil J.....1515 David Whitney Bldg., Detroit 26
Wharton, Thomas V.....1809 Oak St., Wyandotte
Wheatley, C. E.....10151 Michigan Ave., Dearborn
Wheeler, S. C.....18901 W. Six Mile Road, Detroit 19
Whelan, Joseph L.....28 West Adams Ave., Detroit 26
Whinnery, Randall A.....752 Fisher Bldg., Detroit 2
Whitcomb, C. E.....15756 Kentfield St., Detroit 23
White, Donald H.....1313 Cleveland, Lincoln Park 25
White, Milton W.....2329 E. Grand Blvd., Detroit 11
White, Prosper D.....66 Tuxedo, Highland Park
White, Theodore M.....7159 Michigan Ave., Detroit 10
Whitehead, Leston S.....1718 David Whitney Bldg.,
Detroit 26
Whitehead, Walter K.....413 David Whitney Bldg.,
Detroit 26
Whiteley, Robert K.....541-3 David Whitney Bldg.,
Detroit 26
Whitelock, E. H.....1809 Oak St., Wyandotte
Whitney, Elmer L. (L).....2 Kenberton Dr.,
Pleasant Ridge
Whitney, Rex E.....5525 W. Chicago Blvd., Detroit 4
Whittaker, Alfred H.....1427 E. Jefferson, Detroit 7
Wiant, J. L. (M).....1205 Chesterfield, Birmingham
Wiechowski, Henry E.....10345 Joseph Campau, Detroit
Wiener, Israel.....13011 W. McNichols Road, Detroit 35
Wiener, Morton.....612 Kales Bldg., Detroit 26
Wietersen, Fred K.....260 Manor Road, Rt. 2,
Birmingham
Wight, Fred B.....1048 David Whitney Bldg., Detroit 26
Wikiera, Edward S.....15020 Michigan Ave., Dearborn 2
Wilcox, L. F.....10 Peterboro, Detroit
Wilhelm, Rudolf E., 1st Lt. (M).....The Threefold Farm,
Spring Valley, New York
Wilhelm, Seymour K.....13011 W. McNichols Rd.,
Detroit 21
Wilkinson, A. P.....974 Fisher Bldg., Detroit 2
Williams, Clarence J.....15324 E. Jefferson
Grosse Pte. Park 30
Williams, C. R. (A).....Receiving Hospital, Detroit 26
Williams, Eugene.....10149 Michigan, Dearborn
Williamson, J. G. (A).....3660 Mc Kinley, Dearborn
Williamson, W. A.....4566 Seebaldt, Detroit 4
Wilner, I. A.....17701 W. McNichols Road, Detroit 35
Wilson, Andrew G.....4741 Spokane, Detroit
Wilson, Gerald A.....4741 Spokane, Detroit 4
Wilson, G. M., Jr.....Henry Ford Hospital, Detroit 2
Wilson, G. S.....771 Fisher Bldg., Detroit 2
Wilson, I. D.....4741 Spokane, Detroit 4
Wilson, M. C.....15439 Harper, Detroit 24
Winnick, Lawrence C.....19120 Snowden, Detroit
Winton, George J.....1007 David Stott Bldg., Detroit 26
Wise, Robert K.....15801 W. McNichols, Detroit 35
Wishropp, E. A.....227 Kenwood Court, Grosse Pointe
Wittenberg, Arthur A.....7101 W. Chicago, Detroit
Wittenberg, Samson S.....934 Maccabees Bldg., Detroit 2
Wittenberg, Sydney S.....4400 Livernois, Detroit 10
Witter, Joseph A.....344 Glendale, Detroit 3
Witus, Carl.....18412 Mack Ave., Detroit 24
Witus, Morris.....9036 Dexter Blvd., Detroit 6
Wizer, Mary B. G.....20401 Schaefer, Detroit 35
Wolever, T. H.....Iranian Oil Refining Co., Abadan,
South Iran
Wolfe, Max O.....7-260 General Motors Bldg., Detroit 2
Wollank, Helen Wilson.....15324 East Jefferson,
Detroit 30
Wollenberg, R. A. C. (L).....939 David Whitney Bldg.,
Detroit 26
Wolter, J. G.....Mt. Carmel Mercy Hosp., Detroit 21
Wood, A. L.....25001 Ford Road, Dearborn
Wood, D. J.....2860 Clark St., Detroit 10
Wood, G. P.....2730 E. Jefferson, Detroit 7
Wood, Kenneth A.....3919 John R. St., Detroit 1
Wood, Wilford C.....463 Fisher Bldg., Detroit 2
Woods, A. J.....196 Visger, Detroit 18
Woods, J. J.....16921 James Couzens Hwy., Detroit 35
Woodworth, W. P. (L).....17387 Quincy Ave.,
Detroit 21
Woelfenden, Joseph B.....20055 Mack Ave.,
Grosse Pointe Woods 36
Worley, F. M., Jr.....Henry Ford Hospital, Detroit 2
Worzniak, Joseph J.....2312 Biddle St., Wyandotte
Wreggit, Winston R.....79 Highland Ave., Detroit 3
Wright, C. H.....1549 W. Grand Blvd., Detroit 8
Wruble, Joseph.....411 Seldon, Detroit

Woman's Auxiliary

Directory of Members, 1957

ALLEGAN COUNTY

Brachman, Mrs. Peter.....	352 Cutler, Allegan	Mahan, Mrs. James.....	400 Trowbridge, Allegan
Brown, Mrs. L. F.....	451 W. Allegan, Otsego	Miller, Mrs. Kenneth.....	Douglas
Clark, Mrs. James.....	Box B, Fennville	Mitchell, Mrs. A. B.....	River View Park, Allegan
Goude, Mrs. Gordon.....	R.F.D., Hopkins	Rickert, Mrs. Ruth.....	319 River St., Allegan
Johnson, Mrs. E. B.....	R.R., Allegan	Schneider, Mrs. Harry E.....	311 Cutler St., Allegan
Kromer, Mrs. Robert A.....	Wayland	Vander Kolk, Mrs. Bert.....	Box 236, Hopkins

BAY COUNTY

Alcorn, Mrs. Kent.....	2211 McKinley St., Bay City	Langin, Mrs. John.....	2116 Seventh St., Bay City
Alcorn, Mrs. Marshall.....	210 Pendleton, Bay City	MacRae, Mrs. L. D.....	813 N. Sherman St., Bay City
Allen, Mrs. A. D.....	4151 Two Mile Rd., RFD, Bay City	Mayne, Mrs. John C.....	1409 Fourth, Bay City
Andrews, Mrs. F. T.....	1414 McKinley, Bay City	McDonnell, Mrs. W. R.....	Box 600, Pinconning
Asline, Mrs. J. N.....	310 Valerie Ct., Essexville	McEwan, Mrs. J. H.....	2310 Nurmi Drive, Bay City
Bowman, Mrs. David A.....	2150 Second St., Bay City	McGee, Mrs. Harry.....	4774 Westgate Dr., Bay City
Brown, Mrs. G. M.....	2257 Carroll Rd., Bay City	McLurg, Mrs. John.....	1900 Center, Bay City
Campbell, Mrs. John.....	1838 McKinley, Bay City	Medvezky, Mrs. M. J.....	314 Hill St., Bay City
Chapin, Mrs. F. J.....	2121 Center St., Bay City	Miller, Mrs. Edwin C.....	614 Nurmi Ct., Bay City
Connelly, Mrs. C. J.....	5 Sovey Ct., Essexville	Moore, Mrs. N. R.....	2141 Fifth St., Bay City
Cook, Mrs. Hugh.....	1526 Helen St., Bay City	Mosier, Mrs. D. J.....	307 W. Midland, Bay City
Cosens, Mrs. Stanley A.....	701 Webb, Bay City	Pearson, Mrs. S. M.....	501 W. Jenny St., Bay City
Criswell, Mrs. R. H.....	1412 Center Ave., Bay City	Pelczar, Mrs. Walter.....	321 N. Johnson, Bay City
DeWaele, Mrs. Paul.....	2171 Center Ave., Bay City	Perkins, Mrs. R. C.....	2118 Fifth Ave., Bay City
Drummond, Mrs. Fred.....	Kawkawlin	Reddick, Mrs. Charles.....	2015 Seventh St., Bay City
Dumond, Mrs. V. H.....	1700 Fifth, Bay City	Reed, Mrs. William.....	2230 Groveland, Bay City
Ellison, Mrs. Alfred.....	2010 Second St., Bay City	Reuter, Mrs. C. W.....	5561 Gaertner Ct., Bay City
Foster, Mrs. L. F.....	605 Ames Ct., Bay City	Shafer, Mrs. Harold C.....	324 Green St., Bay City
Freel, Mrs. J. A.....	2202 Eleventh St., Bay City	Shields, Mrs. Hubert L.....	207 Huron, Bay City
Gamble, Mrs. W. G.....	2010 Fifth Ave., Bay City	Slattery, Mrs. M. R.....	2215 McKinley, Bay City
Gale, Mrs. H. M.....	1900 Center Ave., Bay City	Staley, Mrs. Hugh.....	Omer
Gehman, Mrs. Robert.....	Omer	Stinson, Mrs. Walter S.....	4216 Ann Court, Bay City
Grigg, Mrs. John W.....	82 Cedar Dr., Bay City	Suter, Mrs. Don E.....	608 N. Henry, Bay City
Hafford, Mrs. Robert C.....	316 Burns, Essexville	Swantek, Mrs. Chas.....	240 Washington, Bay City
Hagelshaw, Mrs. G. L.....	1203 Fifth Ave., Bay City	Taheri, Mrs. Zai.....	2712 S. Westgate Dr., Bay City
Heuser, Mrs. Harold.....	2021 Sixth St., Bay City	Tarter, Mrs. C. S.....	1712 Center Ave., Bay City
Hickner, Mrs. Lawrence P.....	1715 33rd St., Bay City	Taylor, Mrs. Robert.....	4656 Richardson Dr., Bay City
Horowitz, Mrs. S. F.....	2136 Fifth Ave., Bay City	Tompkins, Mrs. Dana.....	Pinconning
Howland, Mrs. Walter.....	Pinconning	Urmston, Mrs. P. R.....	1862 McKinlay St., Bay City
Huckins, Mrs. E. S.....	436 Cass Ave., Bay City	Vail, Mrs. Harry.....	1600 Borton, Essexville
Huckins, Mrs. Roger.....	404 Trumbull St., Bay City	Wilcox, Mrs. J. W.....	210 Gates, Bay City
Jacoby, Mrs. A. H.....	2202 Ninth, Bay City	Wilson, Mrs. T. G.....	677 Oakwood Beach, Linwood
Jens, Mrs. Otto.....	1106 Prairie, Essexville	Wittwer, Mrs. E. A.....	Detroit
Johnson, Mrs. O. J.....	105 Parkwood, Bay City	Woodburne, Mrs. H. L.....	1107 Borton, Essexville
Jones, Mrs. Culver.....	1024 Rosemary Lane, Essexville	Wright, Mrs. Thomas.....	531 Handy Dr., Bay City
Knobloch, Mrs. H. T.....	1911 Center, Bay City	Zaremba, Mrs. A. J.....	108 S. Madison St., Bay City
Kulinski, Mrs. Eugene.....	207 Huron, Bay City	Ziliak, Mrs. A. L.....	3393 Kiesel Rd., Bay City

BERRIEN COUNTY

Bailey, Mrs. John H.....	2150 Samuel, Benton Harbor	Crowell, Mrs. Richard C.....	1920 Sunset Court, St. Joseph
Beal, Mrs. Gerald.....	114 Hawthorne, St. Joseph	Elghammer, Mrs. Richard.....	1106 Highland, St. Joseph
Benner, Mrs. Wm. H.....	40 B. Lake Shore Dr., St. Joseph	Elliott, Mrs. J. C.....	111 Chippewa, Buchanan
Bliesmer, Mrs. August.....	2108 Morton Ave., St. Joseph	Emery, Mrs. Clayton S.....	1329 Lake Blvd., St. Joseph
Bronfenbrenner, Mrs. J.....	1227 Harriet, St. Joseph	Emery, Mrs. William.....	2932 Lakeview, St. Joseph
Butler, Mrs. William J.....	2216 Lakeview, St. Joseph	Faber, Mrs. Michael.....	176 W. Napier, Benton Harbor
Cawthorne, Mrs. H. J.....	192 Robins, Benton Harbor	Fattic, Mrs. G. R., Jr.....	806 S. 3rd St., Niles
Chickering, Mrs. W. A.....	205 E. Delaware, Benton Harbor	Feeley, Mrs. Marshall.....	2930 Lake View Ave., St. Joseph
Cooper, Mrs. W. L.....	Paw Paw Island, Coloma	Galles, Mrs. James.....	Paw Paw Island, Coloma
Cowdery, Mrs. K. H.....	1620 Niles Ave., St. Joseph	Garrett, Mrs. E. L.....	Rt. No. 3, Niles

Goddard, Mrs. Glendon B.....520 Eagle, Niles
Hassan, Mrs. Kent.....606 Ryncarson, Buchanan
Hayes, Mrs. T. P.....2716 Thayer Dr., St. Joseph
Heath, Mrs. David.....Bridgman
Hershey, Mrs. N. J.....1648 Broadway, Niles
Howard, Mrs. Frank.....808 Columbus, Benton Harbor
Irgens, Mrs. E. R.....910 Kingsley, St. Joseph
Johnston, Mrs. W.....514 Sutherland, St. Joseph
Kelsall, Mrs. Harvey I.....900 Wolcott Ave., St. Joseph
Kennedy, Mrs. Francis.....582 Pearl, Benton Harbor
King, Mrs. B. B.....1290 Seneca, Benton Harbor
Klos, Mrs. Henry.....Highland Ct., St. Joseph
Landgraf, Mrs. Robert L.....527 W. Main, Niles
Lindenfeld, Mrs. Fred H.....443 S. St. Joseph, Niles
Lining, Mrs. Richard.....Highland Ct., St. Joseph
Manning, Mrs. John.....1611 Forbes Ave., St. Joseph
Mesirow, Mrs. Stanley M.....1758 Commonwealth,
Benton Harbor
Moore, Mrs. Scott.....1649 Broadway, Niles
Ozeran, Mrs. Chas.....1565 Miami Rd., Benton Harbor
Polansky, Mrs. Sanford.....1160 Salem, Benton Harbor
Porter, Mrs. Charles.....1589 Colfax, Benton Harbor

Pritchard, Mrs. H. M.....2031 U.S. 31 North, Niles
Rague, Mrs. Paul.....1287 Seneca, Benton Harbor
Ray, Mrs. Dean.....2019 Langley, St. Joseph
Reagan, Mrs. Robert.....232 Windsor, Benton Harbor
Rice, Mrs. Franklin, Jr.....324 N. 4th St., Niles
Richmond, Mrs. Dean.....218 Sunnybank Rd., St. Joseph
Ruth, Mrs. J. Griswold.....507 E. Britain, Benton Harbor
Skinner, Mrs. James.....2716 Thayer, St. Joseph
Sowers, Mrs. B. F.....236 Higman Park, Benton Harbor
Strayer, Mrs. J. C.....103 Moccasin, Buchanan
Strayer, Mrs. John W.....553 Grant St., Niles
Strick, Mrs. M. H.....1759 Commonwealth,
Benton Harbor
Swingle, Mrs. Alvin J.....North Shore Dr., Box 63,
Benton Harbor
Thorup, Mrs. D. W.....1160 Miami Rd., Benton Harbor
Vastine, Mrs. R. J.....430 W. Chicago, Buchanan
Westervelt, Mrs. Herbert O.....539 Pearl St.,
Benton Harbor
Winegar, Mrs. Alvin C.....Lake Shore Dr., St. Joseph
Woodford, Mrs. Hackley E.....255 Oden, Benton Harbor
Zick, Mrs. Luther.....1835 Heath Ct., Benton Harbor

BRANCH COUNTY

Aldrich, Mrs. N. S.....162 Marshall St., Coldwater
Bailey, Mrs. J. E.....292 E. Chicago, Coldwater
Beck, Mrs. P. C.....253 N. Walker, Bronson
Coates, Mrs. Carl.....135 Stringtown Rd., Quincy
Culver, Mrs. Bert W.....72 Division St., Coldwater
Culver, Mrs. D. T.....122 Division St., Coldwater
Frazier, Mrs. Robert J.....156 E. Chicago, Coldwater
Gist, Mrs. Lemuel I.....80 N. Sprague, Coldwater
Gomley, Mrs. Henry G.....435 W. Chicago, Bronson
Harris, Mrs. D. M.....25 N. Fremont St., Coldwater
Heffelfinger, Mrs. J. C.....150 Liberty St., Coldwater
Leitch, Mrs. Robert M.....Rt. No. 2, Union City
Mitchell, Mrs. H. C.....State Home & Training School,
Coldwater

Mooi, Mrs. H. Roy.....20 Fairfield, Coldwater
Moss, Mrs. H. L.....86 W. Clarke Ave., Coldwater
Olmsted, Mrs. William.....136 E. Pearl St., Coldwater
Olmsted, Mrs. K. L.....70 Marshall St., Coldwater
Rennell, Mrs. E. J.....State Home & Training School,
Coldwater
Rick, Mrs. John.....59 N. Circle Dr., Coldwater
Smith, Mrs. Robert.....Union City
Thomas, Mrs. J. A.....390 E. Chicago, Coldwater
Wade, Mrs. R. L.....144 E. Chicago, Coldwater
Walton, Mrs. N. J.....61 E. Chicago, Quincy
Weidner, Mrs. Harold R.....16 S. Fremont, Coldwater

CALHOUN COUNTY

Albright, Mrs. A. A.....Rt. No. 3, Box 380A, Bellevue
Allen, Mrs. Geo. S.....Am. Legion Hosp., Battle Creek
Allen, Mrs. Richard H.....33 Gordon Blvd., Battle Creek
Amos, Mrs. N. H.....191 Waubascacon Rd., Battle Creek
Barden, Mrs. S. P.....Rt. No. 6, Box 9112, Battle Creek
Baribeau, Mrs. Roy.....1003 Capital Ave. S.W.,
Battle Creek
Berghorst, Mrs. John.....89 S. LaVista Blvd.,
Battle Creek
Beuker, Mrs. Herman.....501 N. Kalamazoo, Marshall
Bodine, Mrs. Harold.....396 Country Club Dr.,
Battle Creek
Bonifer, Mrs. Philip.....93 Clinton Drive, Battle Creek
Brown, Mrs. Robert W.....24 Country Club Dr.,
Battle Creek
Campbell, Mrs. Jack.....119 Shadylawn Lane,
Battle Creek
Campbell, Mrs. R. J.....209 Emmett St., Battle Creek
Chandler, Mrs. Edward.....55 N. Broad, Battle Creek
Chynoweth, Mrs. W. R.....88 Ann Ave., Battle Creek
Colquhoun, Mrs. Graham F.....12 Country Club Dr.,
Battle Creek
D'Aversa, Mrs. Gene.....1004 E. Broadwell, Albion
Finch, Mrs. D. L.....72 Jennings Rd., Battle Creek
Fisher, Mrs. Robert E.....1501 W. Michigan Ave.,
Battle Creek
Fraser, Mrs. Robt. H.....198 Fremont St., Battle Creek
Funk, Mrs. L. D.....133 W. Burr Oak St., Athens
Hanan, Mrs. Robert Rt. No. 3, Box 446-B, Battle Creek
Hansen, Mrs. Harvey C.....80 Country Club Dr.,
Battle Creek

Herman, Mrs. L.....Veteran's Administration,
Battle Creek
Hibbs, Mrs. Don.....119 Sunnyside, Battle Creek
Hubly, Mrs. James.....446 Country Club Dr., Battle Creek
Humphrey, Mrs. Arthur.....788 Country Club Dr.,
Battle Creek
Jeffrey, Mrs. J. R.....62 Ann Ave., Battle Creek
Jones, Mrs. Aubrey H.....513 Michigan Ave., Marshall
Jones, Mrs. Ernest F.....Veteran's Administration Hosp.,
Battle Creek
Keagle, Mrs. L. R.....41 Garrison, Battle Creek
Kimball, Mrs. Arthur S., Jr.....196 Capital Ave. N.E.,
Battle Creek
Kingsley, Mrs. Paul.....29 Woodmer Lane, Battle Creek
Klopp, Mrs. E. J.....535 Capital N.E., Battle Creek
LaFrance, Mrs. N. F.....Veteran's Administration,
Battle Creek
Lam, Mrs. Francis L.....151 Sunnyside Dr., Battle Creek
Lancaster, Mrs. Vance B.....119 Ridgeway Dr.,
Battle Creek
Leitch, Mrs. Robert.....Union City
Levy, Mrs. Joseph.....343 Orchard Ave., Battle Creek
Levine, Mrs. Samuel.....Veterans Administration Hosp.,
Battle Creek
Lowe, Mrs. K. H.....Rt. No. 1, Box 381, Augusta
Lowe, Mrs. Stanley.....12 Hiawatha Dr., Battle Creek
Marino, Mrs. S. G.....Veterans Administration Hosp.,
Battle Creek
McCuaig, Mrs. Alfred.....145 Pleasant View Dr.,
Battle Creek

Meister, Mrs. Franklin O.....315 Orchard Ave.,
Battle Creek
Melges, Mrs. Fred J.....314 N. Orchard St., Battle Creek
Parkinson, Mrs. C. E.....Rt. No. 3, Box 605, Battle Creek
Patrick, Mrs. Gilbert T.....16 Hiawatha Dr., Battle Creek
Power, Mrs. John.....231 Fremont St., Battle Creek
Robbert, Mrs. John.....164 Francis Dr., Battle Creek
Robins, Mrs. Hugh.....237 Fremont St., Battle Creek
Rosenfeld, Mrs. Jos.....115 Laurel Dr., Battle Creek
Royer, Mrs. Clark.....125 Sunnyside Dr., Battle Creek
Schwarz, Mrs. Frank.....31 Orchard, Battle Creek
Shellenberger, Mrs. H. M.....131 W. Hanover, Marshall
Shipp, Mrs. Leland P.....611 Jennings Landing,
Battle Creek
Simpson, Mrs. Robert S.....135 Shadywood Lane,
Battle Creek
Slagle, Mrs. Geo. W.....1702 Capitol S.W., Battle Creek
Stadle, Mrs. W. H.....607 Jennings Landing, Battle Creek

Stephenson, Mrs. C. D.....33 Fremont St., Battle Creek
Stiefel, Mrs. R. A.....260 Wahwahtaysee Way,
Battle Creek
Tazelaar, Mrs. Myron A.....219 N. Madison, Battle Creek
VanCamp, Mrs. Elijah.....16 Everett St., Battle Creek
Van Sandt, Mrs. Max M.....252 Garfield Ave.,
Battle Creek
Verity, Mrs. L. E.....64 St. Joseph Lane, Battle Creek
Walters, Mrs. J. F.....265 Sherman Rd., Battle Creek
Wemmer, Mrs. Keith S.....94 Barney Rd., Battle Creek
Wencke, Mrs. Carl G.....127 Park Place, Battle Creek
Whitney, Mrs. J. M.....143 Frelinghuysen, Battle Creek
Williams, Mrs. Edwin G.....271 Chestnut, Battle Creek
Winslow, Mrs. Sherwood.....20 Hiawatha Dr., Battle Creek
Worgess, Mrs. Duane.....205 W. Territorial Rd.,
Battle Creek
Yannitelli, Mrs. S. A.....28 Woodmer Lane, Battle Creek
Zheutlin, Mrs. Bertram.....119 Grand Blvd., Battle Creek
Zindler, Mrs. G. A.....6375 Lacey Rd., Lacey

CHIPPEWA-MACKINAC-LUCE COUNTIES

Blain, Mrs. J. G.....130 Park Place, Sault Ste. Marie
Blair, Mrs. H. M.....811 Summitt St., Sault Ste. Marie
Clausen, Mrs. C. H.....3108 Lakeshore Dr.,
Sault Ste. Marie
Finlayson, Mrs. Donald D.....903 Prospect St.,
Sault Ste. Marie
Hague, Mrs. Howard.....St. Ignace
Hamel, Mrs. Herbert E.....1012 Medora St., St. Ignace
Harrington, Mrs. H. M.....3308 Lakeshore Dr.,
Sault Ste. Marie
Howe, Mrs. Donnell.....1139 E. Portage, Sault Ste. Marie

Mackie, Mrs. T. B.....Mission Rd., Sault Ste. Marie
Rhind, Mrs. Earl.....Riverside Dr., Sault Ste. Marie
Scott, Mrs. D. F.....506 Ravine St., Sault Ste. Marie
Sudranski, Mrs. Herbert F.....312 Emmett,
Sault Ste. Marie
Trapasso, Mrs. T. J.....208 Mission Rd., Sault Ste. Marie
Venier, Mrs. Anthony.....1021 Parnell Ave.,
Sault Ste. Marie
Wallen, Mrs. Leroy J.....410 Dawson, Sault Ste. Marie
Yale, Mrs. I. V.....408 Carrie St., Sault Ste. Marie

CLINTON COUNTY

Bennett, Mrs. George W.....Elsie
Cook, Mrs. Bruno.....Westphalia
Elliott, Mrs. Bruce R.....Ovid
Foo, Mrs. Charles T.....110 E. McConnell, St. Johns
Geib, Mrs. O. P.....Carson City
Grost, Mrs. James.....110 S. Oakland, St. Johns
Henthorn, Mrs. A. C.....105 S. Ottawa, St. Johns
Kirker, Mrs. J. Gilmore.....Fowler

Leider, Mrs. Thomas.....Ovid
McWilliams, Mrs. Wm. B.....210 S. Maple St.,
Maple Rapids
Russell, Mrs. Sherwood.....104 N. Oakland, St. Johns
Sheline, Mrs. V. Lowell.....S. St. Johns St., Ithaca
Slagh, Mrs. E. M.....217 S. Ovid St., Elsie
Smith, Mrs. F. W.....205 W. State St., St. Johns
Stephenson, Mrs. W. F.....501 E. Walker, St. Johns
Stoller, Mrs. Paul F.....St. Johns

DELTA-SCHOOLCRAFT COUNTIES

Anderson, Mrs. Francis.....1012 S. 11th St., Escanaba
Boyce, Mrs. Donald.....1401 1st Ave. So., Escanaba
Defnet, Mrs. Harry.....248 Lake Shore, Escanaba
Dehlin, Mrs. J. R.....1225 Minnesota Ave., Gladstone
Fyvie, Mrs. James.....210 Range St., Manistique
Groos, Mrs. Louis.....1015 S. 1st Ave., Escanaba
Leitch, Mrs. Robert M.....Rt. No. 2, Union City
LeMire, Mrs. D. F.....1811 Lake Shore, Escanaba
LeMire, Mrs. W. A., Jr.....318 Lake Shore, Escanaba

Lindquist, Mrs. N. L.....1815 Lake Shore, Escanaba
McInerney, Mrs. T. A.....1616 16th Ave. S., Escanaba
Mitchell, Mrs. H. C.....State Home & Training School,
Nagy, Mrs. Charles.....Rt. 1, Bark River
Olson, Mrs. Carl.....621 Michigan Ave., Gladstone
Ryde, Mrs. R. E.....750 Lake Shore, Escanaba
Waters, Mrs. Duane.....358 Lake St., Manistique
Coldwater
Wehner, Mrs. Merle D.....540 Cherry, Manistique

DICKINSON-IRON COUNTIES

Addison, Mrs. E. R.....601 State St., Crystal Falls
Alexander, Mrs. Wm. H.....411 East "C" St.,
Iron Mountain
Anderson, Mrs. D. T.....408 Hamilton, Kingsford
Carlson, Mrs. Ralph E.....615 E. "C" St., Iron Mountain
Cecconi, Mrs. Richard D.....801 Kent, Iron Mountain
Cooper, Mrs. C. A.....407 Third, Stambaugh
Gladstone, Mrs. William.....626 Saginaw, Norway
Huron, Mrs. W. H.....215 W. "E" St., Iron Mountain
Irvine, Mrs. L. E.....Sunset Lake, Iron River

McEachran, Mrs. H. D.....401 East "C" St.,
Iron Mountain
Palm, Mrs. Theodore E.....609 Marquette, Crystal Falls
Retallack, Mrs. R. C.....621 W. Genesee, Iron River
Schmoltzler, Mrs. W. A.....373 Woodward,
Iron Mountain
Schroeder, Mrs. John M.....1111 Stockbridge,
Iron Mountain
Smith, Mrs. D. R.....817 W. Brown, Iron Mountain
Steinke, Mrs. Charles.....600 Hamilton, Iron Mountain

EATON COUNTY

Arner, Mrs. Fred L.....Bellevue
Brown, Mrs. B. Philip.....337 S. Cochran, Charlotte
Carothers, Mrs. Daniel F.....243 S. Sheldon, Charlotte
Cook, Mrs. J. M.....404 W. Harris, Charlotte
DeLand, Mrs. C. L.....Bellevue
Landick, Mrs. Robert.....138 S. Bostwick, Charlotte
Matthews, Mrs. Roy W.....W. Henry St., Charlotte
Meinke, Mrs. Richard K.....Eaton Rapids

Myers, Mrs. A. W.....Pottersville
Riley, Mrs. Joseph, Jr.....324 Horatio Ave., Charlotte
Sevener, Mrs. Lester G.....608 W. Stoddard, Charlotte
Sherman, Mrs. Eber.....Eaton Rapids
Van Ark, Mrs. Bert.....Eaton Rapids
Van Ark, Mrs. Herman.....Eaton Rapids
Willits, Mrs. C. O.....127 Upland Ave., Charlotte

GENESEE COUNTY

Adams, Mrs. Burnell.....609 S. Lynch, Flint
Adams, Mrs. Chester.....610 E. Grand Blanc Rd.,
Grand Blanc
Anderson, Mrs. Harley.....11820 N. Saginaw, Mt. Morris
Andrews, Mrs. N. A. C.....310 E. Main St., Flushing
Anthony, Mrs. George.....912 Beard, Flint
Backus, Mrs. Glenn.....3131 Westwood Pkwy., Flint
Baird, Mrs. W. C.....1818 Ramsey Blvd., Flint
Barbour, Mrs. Fleming.....2015 Lincoln Dr., Flint
Barger, Mrs. Andrew.....2730 Golfside, Flint
Baske, Mrs. Franklin.....923 Maxine, Flint
Bateman, Mrs. L. G.....1708 E. Second, Flint
Batdorf, Mrs. John.....10114 Hegel, Goodrich
Benson, Mrs. John.....1410 E. Court, Flint
Berman, Mrs. Harry.....927 Beard, Flint
Bernstein, Mrs. Eli.....3211 Westwood Pkwy., Flint
Best, Mrs. John.....3712 Brownell, Flint
Beyer, Mrs. George.....3329 Elmwood, Clio
Bird, Mrs. W. G.....133 Odette, Flint
Bishop, Mrs. D. L.....1024 Woodside Dr., Flint
Bogart, Mrs. Leon.....1125 South Dr., Flint
Boles, Mrs. William.....1407 Woodcroft, Flint
Bonathan, Mrs. A. T.....3002 Parkside Dr., Flint
Branch, Mrs. Hira.....1014 Woodside, Flint
Brasie, Mrs. Donald.....310 Josephine, Flint
Bruce, Mrs. William.....5397 Miller Rd., Swartz Creek
Bryant, Mrs. Donald.....3109 Mallery, Flint
Buchanan, Mrs. William.....902 S. Leroy, Fenton
Chambers, Mrs. Myrton.....3402 Westwood Pkwy., Flint
Charters, Mrs. John.....11089 Fenton Rd., Fenton
Chase, Mrs. William.....1318 N. Ballenger Rd., Flint
Clark, Mrs. Robert.....2602 Thomas, Flint
Collins, Mrs. James.....902 Stockwell, Flint
Colwell, Mrs. Clifford W.....2011 Briar Hill, Flint
Connell, Mrs. J. T.....Coldwater Rd., R.F. No. 1, Flint
Conover, Mrs. George.....G-1152 N. Dye Rd., Flint
Conover, Mrs. McClellan.....724 East, Flint
Conover, Mrs. T. S.....2112 Radcliffe, Flint
Cook, Mrs. Henry.....1819 Chelsea Circle, Flint
Coriasso, Mrs. Louis B.....409 W. Genesee, Flint
Credille, Mrs. Barney.....2020 E. Second, Flint
Curtin, Mrs. John.....915 E. Court St., Flint
Currey, Mrs. G.....3021 Westwood Pkwy., Flint
Cutler, Mrs. Campbell.....3130 Concord, Flint
Davis, Mrs. Robert C.....407 Fremont, Flint
Dawson, Mrs. Ralph E.....1617 Linwood Ave., Flint
Del-Zingro, Mrs. Nicholas.....Davison
Dickstein, Mrs. Bernard.....1110 W. Hamilton, Flint
Dimond, Mrs. E. G.....G-5046 McCandlish Rd.,
Grand Blanc
Dodds, Mrs. Frederick.....1291 Kearsley Park Blvd., Flint
Dodds, Mrs. Max.....1718 Kenwood, Flint
Dorsey, Mrs. Philip.....G-1334 N. Dye Rd., Flint
Drewyer, Mrs. Glenn.....5327 W. Reid Rd., Swartz Creek
Dykewicz, Mrs. Richard.....3117 Sunset Dr., Flint
Eaton, Mrs. Wayne.....818 Kensington, Flint
Eichhorn, Mrs. Ernest.....1301 Riverdale Rd., Flint
Eickhorst, Mrs. Thomas.....2562 Nolen, Flint
Elliott, Mrs. H. B.....2380 Nolen Dr., Flint
Engleman, Mrs. Raymond.....3710 Sherwood Dr., Flint
Ettinger, Mrs. Ralph.....409 South East, Fenton

Farah, Mrs. Ben.....342 Bradley, Flint
Farhat, Mrs. Maynard.....1901 Hampden Rd., Flint
Fee, Mrs. Manson.....1002 Maxine, Flint
Finkelstein, Mrs. T.....1633 Seminole St., Flint
Flanagan, Mrs. Curtis.....G-4112 Miller Rd., Flint
Flynn, Mrs. Southard.....2354 Nolen Dr., Flint
Forrer, Mrs. Graydon.....124 W. 4th St., Flint
Gellenger, Mrs. Stephen.....2125 Detroit, Flint
Gleason, Mrs. N. A.....1309 Blanchard, Flint
Golden, Mrs. H. M.....1511 Woodcroft, Flint
Gorne, Mrs. S. S.....1009 Woodside Dr., Flint
Grady, Mrs. Donald.....1515 Woodslea, Flint
Griffin, Mrs. Ernest.....1505 Arrow Lane, Flint
Grover, Mrs. H. F.....3509 Norwood Dr., Flint
Guile, Mrs. Gurdon.....1621 Dupont, Flint
Gundry, Mrs. George.....11736 S. Saginaw, Grand Blanc
Gutow, Mrs. I. H.....3020 Westwood Pkwy., Flint
Gutow, Mrs. J. J.....3759 Sunset Dr., Flint
Hackley, Mrs. Richard.....422 Grace St., Flint
Hague, Mrs. Robert.....8231 River Rd., Flushing
Harper, Mrs. Alex.....712 Thomson St., Flint
Harper, Mrs. Homer.....713 Thomson St., Flint
Hauser, Mrs. Fred.....1027 Manning Court, Flint
Hill, Mrs. Wm. T.....4075 W. Bristol Rd., Flint
Hiscock, Mrs. Harold.....2021 Briar Hill, Flint
Hooper, Mrs. Kendall.....3460 Hawthorne Dr., Flint
Hubbard, Mrs. Wm.....1205 Maxine, Flint
Hufton, Mrs. W. L.....2546 Nolen Dr., Flint
Jaarsma, Mrs. Raymond.....928 Woodside Dr., Flint
Jackson, Mrs. Donald.....312 Elmwood Dr., Davison
James, Mrs. Robert.....3001 S. Saginaw, Flint
Jermstad, Mrs. Robert.....623 E. Third Ave., Flint
Johnson, Mrs. Frank.....235 W. Hamilton, Flint
Johnson, Mrs. Frank D.....11069 Clio Rd., Clio
Johnson, Mrs. Raymond.....5173 W. Reid Rd.,
Swartz Creek
Judd, Mrs. Alvin.....2912 Circle Dr., Flint
Kaufman, Mrs. L. D.....1617 Neome Dr., Flint
Knapp, Mrs. Don.....712 Mann Ave., Flint
Knapp, Mrs. Wm.....1138 Woodside Dr., Flint
Kretchmar, Mrs. Arthur.....G-1135 N. Dye Rd., Flint
Kurtz, Mrs. John J.....G-2391 Reid Rd., Flint
LeMieux, Mrs. Leslie.....2801 Norbert Dr., Flint
Lewis, Mrs. Thomas.....4047 Mitchell Dr., Flint
Limbach, Mrs. David.....1801 Chelsea, Fenton
Lindman, Mrs. Thos.....2538 Norbert, Flint
Livesay, Mrs. Jackson.....702 Blanchard St., Flint
Lukens, Mrs. John.....1317 W. Genesee, Flint
Lundeen, Mrs. R. M.....3046 Canterbury, Flint
Lyttle, Mrs. Sydney.....4005 Sterling, Flint
MacGregor, Mrs. Delbert.....722 W. Hamilton Ave., Flint
Mackwood, Mrs. Joseph.....3340 Parkside Dr., Flint
Marsh, Mrs. Elizabeth.....312 Buckingham, Flint
Marshall, Mrs. Sophie.....P.O. Box 885 Olympia,
Washington
Mathias, Mrs. Berton.....3905 Proctor, Flint
McLeod, Mrs. Kenneth.....1001 Welch Blvd., Flint
McMurray, Mrs. Richard.....3818 Begole, Flint
McTaggart, Mrs. David.....926 Beard St., Flint
Michael, Mrs. Sidney.....922 Welsh Blvd., Flint
Michels, Mrs. Robert.....409 N. McKinley Rd., Flushing

Michelson, Mrs. Richard.....2509 E. Court St., Flint
Miltich, Mrs. Anthony.....2222 Colfax, Flint
Miner, Mrs. F. B.....1000 E. Seventh St., Flint
Moore, Mrs. Glen.....1505 Duran St., Flint
Moore, Mrs. Kenneth.....2717 Circle Dr., Flint
Morrison, Mrs. William.....205 Perry Rd., Grand Blanc
Morrissey, Mrs. Vaughn.....101 Stockdale, Flint
Morton, Mrs. Joseph.....1648 Euclid St., Flint
Murphy, Mrs. Grant.....1825 Chelsea, Flint
Neiswander, Mrs. Paul.....2552 Thomas, Flint
Nicholls, Mrs. Wm.....168 E. Stewart, Flint
Odle, Mrs. I. D.....201 Welch, Flint
Orr, Mrs. Walter.....13396 Enid Blvd., Fenton
Osher, Mrs. Seymour.....915 E. Court, Flint
Parliament, Mrs. Bert.....2715 Orchard Lane, Flint
Pfeifer, Mrs. A. C.....12205 N. Saginaw Rd., Mt. Morris
Phelps, Mrs. Lynn.....Goodrich Hospital, Goodrich
Phillips, Mrs. Robert.....2613 Thomas, Flint
Pickering, Mrs. Woodrow.....1602 N. Ballenger, Flint
Polich, Mrs. John.....1520 Kermit, Flint
Portney, Mrs. Jack.....1818 E. Court, Flint
Preston, Mrs. Otto.....1315 Maxine, Flint
Quin, Mrs. John.....417 Greenfield, Flint
Rappart, Mrs. Richard.....2306 Miller Rd., Flint
Rawling, Mrs. John.....1817 Bayberry, Flint
Rawlings, Mrs. J. Mott.....1601 Neome Dr., Flint
Reid, Mrs. John.....627 Campbell, Flint
Rieth, Mrs. George F.....G-6452 Davison Rd., Flint
Richeson, Mrs. V. N.....702 W. Hamilton, Flint
Rowe, Mrs. John.....1601 Lyon, Flint
Rulney, Mrs. Max.....323 Ferndale Pl., Flint
Rundles, Mrs. W. Z., Sr.....G-6573 Flushing Rd., Flint
Rundles, Mrs. W. Z., Jr.....607 Rome Court, Flint
Sandberg, Mrs. Russell.....2030 Pierce, Flint
Sandy, Mrs. Kenneth.....2701 Detroit, Flint
Scavarda, Mrs. Charles.....2101 E. Court, Flint
Schiff, Mrs. Benton.....3040 Parkside Dr., Flint
Schmidlin, Mrs. Robert.....820 E. Atherton Rd., Flint
Schultz, Mrs. J. S.....3327 Fleming Rd., Flint
Schwartz, Mrs. John.....2920 Dupont St., Flint

Seymour, Mrs. George.....2411 Ashland, Clio
Shantz, Mrs. Layton.....2026 Calumet, Flint
Sheeran, Mrs. Dan.....610 S. Vernon, Flint
Shipman, Mrs. Charles.....602 Kensington, Flint
Simoni, Mrs. Lewis.....702 Kensington, Flint
Smith, Mrs. D. C.....811 Thompson, Flint
Smith, Mrs. Eugene C.....916 Woodside, Flint
Smith, Mrs. Harold.....1952 Miller Rd., Flint
Smith, Mrs. M. J.....1521 Cromwell, Flint
Sniderman, Mrs. Ben.....3738 Norwood, Flint
Sorkin, Mrs. M. L.....4001 Greenbrook, Flint
Sorkin, Mrs. Sam.....1919 Miller Rd., Flint
Sparks, Mrs. Harvey.....2749 Thomas, Flint
Steffe, Mrs. Ralph.....1617 Brookwood, Flint
Steinman, Mrs. Floyd.....2418 Nolen Dr., Flint
Stevens, Mrs. Philip K.....468 Commonwealth, Flint
Stevenson, Mrs. Wm.....1901 Ramsey, Flint
Stroup, Mrs. Clayton.....G-5208 E. Court, Flint
Thompson, Mrs. Alvin.....1607 Cromwell, Flint
Thompson, Mrs. Jack.....3031 Westwood Pkwy., Flint
Tuuri, Mrs. Arthur.....1707 Greenway, Flint
Van Harn, Mrs. Ray.....2101 Winona, Flint
Varney, Mrs. Howard.....2564 Thomas St., Flint
Vary, Mrs. Edwin.....2472 Nolen Dr., Flint
Wade, Mrs. Franklin.....213 W. Paterson St., Flint
Ware, Mrs. Frank.....902 Woodside Dr., Flint
Wark, Mrs. D. R.....1315 Detroit, Flint
Weber, Mrs. Robert.....2602 N. Stevenson St., Flint
Wentworth, Mrs. John.....1651 Chevrolet Ave., Flint
Wheeler, Mrs. J. D.....2506 Begole, Flint
White, Mrs. Herbert.....1620 Mason, Flint
Williams, Mrs. W. S.....5216 S. Genesee Rd.,
Grand Blanc
Willoughby, Mrs. Gordon.....5013 N. Saginaw, Flint
Willoughby, Mrs. L. L.....1017 Woodlawn Pkwy., Flint
Wills, Mrs. T. N.....G-1360 N. Packard, Flint
Winchester, Mrs. Walter.....801 E. 9th St., Flint
Woughter, Mrs. Harold.....2123 Radcliff, Flint
Wright, Mrs. Don R.....403 W. Court St., Flint
Wyatt, Mrs. William.....1317 Riverdale Rd., Flint

GOGEBIC-ONTONAGAN COUNTIES

Albert, Mrs. Sam G.....221 E. Coolidge Ave., Ironwood
Davidson, Mrs. Donald L.....Ramsay
Eisele, Mrs. David C.....120 W. Francis St., Ironwood
Frank, Mrs. J. R.....525 Harrison, Wakefield
Gingrich, Mrs. Wayne A.....Lake Rd., Ironwood
Gorrilla, Mrs. A. C.....516 N. Lawrence, Ironwood
Harrington, Mrs. Rex R.....104 E. Ridge St., Ironwood
Hogue, Mrs. Harold.....Ewen
Keskey, Mrs. Theodore.....205 W. Coolidge, Ironwood

McEnroe, Mrs. John E.....7 Newport Heights, Ironwood
O'Brien, Mrs. A. J.....419 E. Vaughn, Ironwood
Pinkerton, Mrs. H. A.....9 Newport Heights, Ironwood
Santini, Mrs. Florian.....615 N. Lowell St., Ironwood
Stevens, Mrs. Charles E.....414 N. Lowell St., Ironwood
Tressel, Mrs. H. A.....308 Sunday Lake St., Wakefield
Von Varga, Mrs. Louis.....Grand View Hosp., Ironwood
Wacek, Mrs. William H.....809 Sunset Rd., Ironwood

GRAND TRAVERSE-LEELANAU-BENZIE COUNTIES

Beall, Mrs. J. G.....P.O. Box 283, Traverse City
Behan, Mrs. Gerald W.....Rt. 3, Box 390, Traverse City
Benjamin, Mrs. Mac.....619 N. Elmwood Ave.,
Traverse City
Bolan, Mrs. E. J.....Sutton's Bay
Brownson, Mrs. Jay J.....Kingsley
Brownson, Mrs. K. M.....Peninsula Dr., Traverse City
Bushong, Mrs. B. B.....318 Wellington Ave.,
Traverse City
Clark, Mrs. Chas. D.....6874 Peninsula Dr.,
Traverse City
Cline, Mrs. Theodore.....R.R. No. 5, Box 611,
Traverse City
Cline, Mrs. Warren.....1629 S. High St., Traverse City
Ellis, Mrs. Claude.....Sutton's Bay
Feibing, Mrs. Jack.....1109 Bay St., Traverse City
Ferguson, Mrs. J.....Box C, Traverse City
Gallagher, Mrs. Wm.....Box C, Traverse City
Haberlein, Mrs. Charles.....701 Monroe, Traverse City

Hall, Mrs. J. W.....Peninsula Dr., Traverse City
Hamilton, Mrs. E. E.....627 Ahgosa Trail, Traverse City
Huene, Mrs. Nevin.....508 State St., Traverse City
Jerome, Mrs. J. T.....609 6th St., Traverse City
Lawton, Mrs. F. L.....540 West 7th St., Traverse City
Lemen, Mrs. C. E.....521 Washington Ave., Traverse City
Linn, Mrs. Frank.....Box C, Traverse City
Lossman, Mrs. Robert.....Deepwater Point, R.F.D. No. 2,
Williamsburg
McClay, Mrs. Adam C.....6330 Peninsula Dr.,
Traverse City
Merritt, Mrs. H. E.....112½ E. Front St., Traverse City
Milliken, Mrs. John.....1435 Peninsula Dr., Traverse City
Nickels, Mrs. M. M.....R.R. No. 4, Box 121,
Traverse City
Osterlin, Mrs. Mark.....Peninsula Dr., Rt. 10,
Traverse City
Osterhagen, Mrs. Harold.....W. Bay Shore Rd.,
Traverse City

Otto, Mrs. D. L.....625 Monroe Ave., Traverse City
 Pike, Mrs. D. G.....E. Bay Shore Dr., Traverse City
 Power, Mrs. Frank.....521 Sixth St., Traverse City
 Salon, Mrs. D.....216 South Elmwood, Traverse City
 Scott, Mrs. John.....536 Washington St., Traverse City
 Sladek, Mrs. E. F.....224 Seventh St., Traverse City
 Steele, Mrs. Wm. M.....1215 S. Union St., Traverse City
 Stokes, Mrs. G. E.....425 Sixth St., Traverse City
 Sweeney, Mrs. Bernard..Grandview Pkwy., Traverse City

Thirlby, Mrs. E. L.....520 Sixth St., Traverse City
 Thirlby, Mrs. Richard....1315 Wayne St., Traverse City
 Wagener, Mrs. Creighton..Rt. 1, Box 144, Traverse City
 Weih, Mrs. J. E.....U. S. 31 North, Traverse City
 Weitz, Mrs. Harry.....529 Monroe, Traverse City
 Wilcox, Mrs. Paul H.....526 W. 10th, Traverse City
 Wright, Mrs. Johnson.....1027 E. Front St., Traverse City
 Zielke, Mrs. I. H.....318 Wellington, Traverse City
 Zimmerman, Mrs. J. G....606 N. Elmwood, Traverse City

GRATIOT-ISABELLA-CLARE COUNTIES

Barstow, Mrs. W. E.....215 W. Saginaw, St. Louis
 Bedo, Mrs. A. V.....908 S. Franklin, Mt. Pleasant
 Chamberlain, Mrs. R. W.....608 E. Chippewa, Mt. Pleasant
 Chamichian, Mrs. Soren....1026 S. Drive, Mt. Pleasant
 Davis, Mrs. L. L.....314 S. Brown, Mt. Pleasant
 Dunlop, Mrs. Donald.....Clare
 Hall, Mrs. Robert.....805 Douglas, Mt. Pleasant
 Hammerburg, Mrs. Kuno.....622 McEwen, Clare
 Harrigan, Mrs. W. L.....408 E. Broadway, Mt. Pleasant
 Hedges, Mrs. F. W.....General Delivery, Edmore
 Hoogerland, Mrs. C. L.....514 Iowa, Alma

Juhnke, Mrs. L. W.....1050 E. Maple St., Mt. Pleasant
 Oldham, Mrs. E. S.....Breckenridge
 Palmer, Mrs. Fred W.....P.O. Box 32, W. Pickard, Mt. Pleasant
 Ringer, Mrs. P.....700 S. Fancher, Mt. Pleasant
 Rottschafer, Mrs. J. L.....715 W. Center St., Alma
 Silvert, Mrs. Pasche P.....Vestaberg
 Waggoner, Mrs. R. L.....120 W. Center St., St. Louis
 Wallman, Mrs. C. H.....901 State St., Alma
 Wickert, Mrs. L. R.....203 N. Fancher, Mt. Pleasant
 Wilcox, Mrs. R.....203 West End St., Alma
 Wood, Mrs. John M.....815 E. Maple St., Mt. Pleasant

HOUGHTON-BARAGA-KEWEENAW COUNTIES

Aldrich, Mrs. A. B.....325 Harris Ave., Hancock
 Aldrich, Mrs. A. D.....U. S. 41, Chassel
 Aldrich, Mrs. L. C.....1609 E. Houghton, Houghton
 Bourland, Mrs. P. D.....134 Calumet Ave., Calumet
 Burke, Mrs. J. J.....102 Duncan Ave., Hubbell
 Hillmer, Mrs. R. E.....1 Algoma, Painesdale
 Hosking, Mrs. Frederick.....328 Florida, Laurium
 Janis, Mrs. A. F.....200 East St., Hancock
 King, Mrs. Sidney.....218 Harris Ave., Hancock
 Kolb, Mrs. F. E.....128 Calumet St., Calumet
 LaBine, Mrs. Alfred.....1019 College Ave., Houghton
 Larson, Mrs. F.....1400 E. Houghton, Houghton
 Lepisto, Mrs. Victor.....515 Lake Linden Ave., Laurium

Levin, Mrs. Simon.....1209 College, Houghton
 Lund, Mrs. Chester.....1205 Calumet, Lake Linden
 Manthei, Mrs. W. A.....5426 Calumet, Lake Linden
 Murphy, Mrs. P. J.....126 Calumet, Calumet
 Nolan, Mrs. Lewis E.....1033 Mine St., Calumet
 Repolo, Mrs. K.....338 S. Iroquois, Laurium
 Roche, Mrs. A. M.....204 Pewabic, Laurium
 Rupprecht, Mrs. C. H.....117 Fifth St., Calumet
 Sloan, Mrs. P. S.....214 Clark St., Houghton
 Smith, Mrs. Chas.....E. White St., Hancock
 Stroube, Mrs. John A....Baraga County Hospital, L'Anse
 Wickliffe, Mrs. T. P.....1167 Calumet Ave., Calumet
 Winkler, Mrs. H. J.....L'Anse

HURON COUNTY

Bash, Mrs. Theodore.....Kinde
 Dixon, Mrs. Ralph.....Pigeon
 Elliott, Mrs. C. S.....Pigeon
 Gettel, Mrs. Roy.....634 W. Huron Dr., Bad Axe
 Herrington, Mrs. Willet....120 N. Hanselman, Bad Axe
 Oakes, Mrs. C. W.....Box 26, Harbor Beach
 Ritsema, Mrs. John.....Sebewaing

Schuerer, Mrs. Clare A.....Pigeon
 Sorensen, Mrs. Maurice.....Elkton
 Steinhardt, Mrs. Edward.....Bad Axe
 Thompson, Mrs. J. E.....Caseville
 Turner, Mrs. Phillip.....Harbor Beach
 Wible, Mrs. Charles.....Sebewaing

INGHAM COUNTY

Agate, Mrs. G. H.....1065 Sunset Lane, East Lansing
 Alexander, Mrs. Reuben G.....Laingsburg
 Altland, Mrs. J. K.....West Mt. Hope Rd., Rt. 2, Lansing
 Asselin, Mrs. David.....1001 Glenhaven, East Lansing
 Badgley, Mrs. W. O.....1523 W. Ionia St., Lansing
 Baker, Mrs. Thomas C.....1726 Windsor Pl., Lansing
 Bates, Mrs. Richard D.....326 Northlawn, East Lansing
 Bauer, Mrs. T. I.....839 Wildwood Dr., East Lansing
 Behney, Mrs. Chas. A.....306 W. Madison, Lansing
 Berens, Mrs. Burdette.....1434 Bassett, Lansing
 Bevez, Mrs. Frank.....3209 Cambridge Rd., Lansing
 Bingham, Mrs. B. Wayne....1123 N. Hayford, Lansing
 Bradford, Mrs. C. W.....832 Westlawn St., East Lansing
 Breakey, Mrs. Robert.....520 Westmoreland, Lansing
 Brown, Mrs. F. W., Jr.....706 Britten, Lansing

Brubaker, Mrs. Earl.....444 S. Verlinden, Lansing
 Brucker, Mrs. Karl.....610 S. Walnut St., Lansing
 Burhans, Mrs. John.....366 Marshall St., East Lansing
 Burhans, Mrs. R. A.....973 Rosewood, East Lansing
 Cairns, Mrs. D. A.....300 S. Washington Ave., Masor
 Calomeni, Mrs. A. D.....1523 W. Michigan Ave., Lansing
 Cameron, Mrs. W. J.....920 N. Capitol, Lansing
 Carlson, Mrs. Ralph.....1136 Hapeman, Lansing
 Carr, Mrs. E. I.....1915 Moores River Dr., Lansing
 Casey, Mrs. Byron.....337 Chesterfield Pkwy., East Lansing
 Cheney, Mrs. W. D.....Rt. 2, Okemo
 Christian, Mrs. L. G.....400 Everett Dr., Lansing
 Clark, Mrs. W. E.....809 Ash St., Masor
 Clinton, Mrs. G. R.....618 S. Jefferson, Masor
 Combs, Mrs. Robert.....403 Butterfield, East Lansing
 Comstock, Mrs. H. C.....512 Division, East Lansing

Cook, Mrs. R. J.....105 S. Jenison, Lansing
Cope, Mrs. H. E.....605 Westmoreland, Lansing
Cordes, Mrs. Jerome F.....2290 Shawnee Trail Okemos
Cowan, Mrs. John A.....825 Touraine, East Lansing
Cross, Mrs. F. S.....432 Highland, East Lansing
Cummings, Mrs. G. D.....511 Westmoreland, Lansing
Cushman, Mrs. F. J.....408 N. Sycamore, Lansing
Darling, Mrs. L. H.....431 S. Verlinden Ave., Lansing
Dawe, Mrs. C. D.....935 Rosewood, East Lansing
Davenport, Mrs. C. S.....320 N. Sycamore St., Lansing
Dean, Mrs. Carleton.....155 Maplewood Dr., East Lansing
DeVries, Mrs. C. F.....Delta River Rd., Lansing
Doyle, Mrs. C. P.....215 N. Logan, Lansing
Drolett, Mrs. Don.....2408 Arlington Rd., Lansing
Drolett, Mrs. F. C.....1623 Inverness, Lansing
Drolett, Mrs. L. A.....228 S. Jenison, Lansing
Dunn, Mrs. F. M.....614 Whitehills Dr., East Lansing
Feehey, Mrs. K. J.....822 Durant, Lansing
Feurig, Mrs. James.....321 Kensington Rd., East Lansing
Finch, Mrs. R. L.....1538 Forbes, Lansing
Folkers, Mrs. Leonard.....991 Rosewood, East Lansing
Fortino, Mrs. S. P.....444 West St., Lansing
Fosget, Mrs. Wilbur.....210 E. Hillsdale, Lansing
Freeland, Mrs. Orrin H.....602 N. Hogsback Rd., Mason
French, Mrs. H. L.....Delta River Rd., Lansing
Fryer, Mrs. Douglas.....726 Touraine, East Lansing
Gardner, Mrs. C. B.....1815 Moores River Dr., Lansing
Garlinghouse, Mrs. A. J.....922 Green St., Lansing
George, Mrs. H. C.....444 Spartan Ave., East Lansing
Goldner, Mrs. R. E.....744 Verlinden Ave., Lansing
Govons, Mrs. Sidney.....1606 W. Kalamazoo, Lansing
Harris, Mrs. H. W.....1400 Wellington Rd., Lansing
Harrison, Mrs. Wm. H.....1306 Hyland, Lansing
Harrold, Mrs. J. F.....1713 Osborn Rd., Lansing
Hart, Mrs. L. C.....119 W. Lenawee, Lansing
Hayes, Mrs. Robert E.....1622 Sunnyside, Lansing
Hayford, Mrs. W. D.....1006 Wildwood Dr., East Lansing
Haze, Mrs. H. A.....Hotel Olds, Lansing
Heald, Mrs. Gordon.....538 Walbridge Dr., East Lansing
Heckert, Mrs. F. B.....Delta River Rd., Lansing
Heckert, Mrs. J. K.....E. Grand River at Hagadorn, East Lansing
Heerdt, Mrs. Mark.....2195 Kent, Okemos
Henderson, Mrs. Norman.....826 Sunset Lane, East Lansing
Hermes, Mrs. E. J.....604 W. Willow St., Lansing
Heustis, Mrs. A. E.....410 Cowley Ave., East Lansing
Himmelberger, Mrs. R. J.....227 West, Lansing
Hodges, Mrs. Kenneth.....421 West St., Lansing
Hofstra, Mrs. Raymond.....1629 Berkeley Dr., Lansing
Hogg, Mrs. Raymond.....4172 Dallas, Holt
Holland, Mrs. Charles F.....166 Orchard, East Lansing
Holm, Mrs. M. L.....913 W. Allegan, Lansing
Huggett, Mrs. C. C.....1531 Osborne, Lansing
Isbister, Mrs. J. L.....104 S. Jenison, Lansing
Jacob, Mrs. S. S.....320 Curtis Rd., East Lansing
Johnson, Mrs. David B.....1426 Sherwood, East Lansing
Johnson, Mrs. K. H.....1539 Spencer, Lansing
Johnson, Mrs. H. T.....817 N. Foster, Lansing
Jones, Mrs. F. A., Sr.....1025 Roxburgh Rd., East Lansing
Jones, Mrs. F. A., Jr.....1025 Roxburgh Rd., East Lansing
June, Mrs. R. C.....426 S. Walnut St., Lansing
Kahn, Mrs. David.....1519 Pershing Ave., Lansing
Kalmbach, Mrs. R. E.....927 Verlinden, Lansing
Keim, Mrs. C. D.....1415 W. Kalamazoo St., Lansing
Kelly, Mrs. William.....403 S. Sycamore St., Lansing
Klunzinger, Mrs. Willard.....810 Roxburgh Rd., East Lansing
Landy, Mrs. G. R.....1023 North Jenison, Lansing
Lange, Mrs. Philip F.....1652 Sunnyside, Lansing
LeDuc, Mrs. Don.....405 University Dr., East Lansing
Leshock, Mrs. J. C.....419 Clarendon, East Lansing
Le Vett, Mrs. H. L.....431 Kedzie Dr., East Lansing
Lewis, Mrs. Clayton.....727 Audubon Rd., East Lansing
Long, Mrs. Chas.....1831 Roseland, East Lansing

Loree, Mrs. M. C.....1615 Abbott Rd., East Lansing
Lucas, Mrs. T. A.....2629 Creston, Lansing
Ludlum, Mrs. L. C.....1126 W. Saginaw, Lansing
Malcolm, Mrs. H. E.....421 Oxford Rd., East Lansing
McCorvie, Mrs. C. R.....12A Hillcrest Village, East Lansing
McCorvie, Mrs. Donald.....Williamston
McCrumb, Mrs. R. R.....1216 Parkdale, Lansing
McGill, Mrs. Arthur.....804½ Vine St., Lansing
McGillicuddy, Mrs. O. B.....407 Walbridge Dr., East Lansing
McGillicuddy, Mrs. Robert.....528 E. Oakwood Dr., East Lansing
McIntyre, Mrs. J. E.....600 S. Grand Ave., Lansing
McLaughlin, Mrs. John H.....418 La Salle Blvd., Lansing
McNamara, Mrs. B. E.....804 W. Ottawa St., Lansing
Meade, Mrs. Robert.....834 Rosewood, East Lansing
Meade, Mrs. Wm.....535 Ardson Rd., East Lansing
Melick, Mrs. R. C.....1616 W. Michigan, Lansing
Menzies, Mrs. Clifford.....734 Linden St., East Lansing
Mercer, Mrs. W. E.....909 Glenhaven, East Lansing
Miller, Mrs. H. A.....1600 Roseland, Royal Oak
Morrow, Mrs. R. J.....411 W. Ottawa St., Lansing
Musson Mrs. E. K.....812 N. Foster, Lansing
Nakfoor, Mrs. Eugene C.....1515 W. Mt. Hope Ave., Lansing
Neering, Mrs. Jas. C.....517 Carey, Lansing
Niland, Mrs. Paul.....1222 Blake St., Lansing
Ochsner, Mrs. P. J.....3129 Cambridge Rd., Lansing
Osborn, Mrs. S.....528 W. Ottawa St., Lansing
Paine, Mrs. Wm. G.....724 Rosewood Ave., East Lansing
Palmer, Mrs. R. E.....535½ S. Capitol, Lansing
Peets, Mrs. R. C.....2266 Shawnee Trail, Okemos
Phillips, Mrs. David.....333 N. Chestnut, Lansing
Phillips, Mrs. R. W.....West Yakeley Hall, M.S.U., East Lansing
Pinkham, Mrs. R. A.....535 N. Capitol Ave., Lansing
Plesscher, Mrs. W. H.....153 E. Brookfield, East Lansing
Pomeroy, Mrs. R. W.....504 Division, East Lansing
Ponton, Mrs. Joseph.....N. Phillips Rd., Mason
Poppen, Mrs. C. I.....1057 Roxborough Rd., East Lansing
Prall, Mrs. H. J.....214 W. Main St., Lansing
Randall, Mrs. O. M.....1805 Moores River Dr., Lansing
Richards, Mrs. Frank.....311 Kensington Rd., East Lansing
Robson, Mrs. E. J.....728 Audubon Rd., East Lansing
Rollstin, Mrs. R. A.....4796 Ardmore Rd., Okemos
Rozan, Mrs. J. S.....1142 Blake Ave., Lansing
Ruhmkorff, Mrs. Ralph H.....1060 Glenhaven, East Lansing
Rulison, Mrs. J. G.....2100 Colonial Plaza, Lansing
Russell, Mrs. Claude V.....3813 W. Willow, Lansing
Rutledge, Mrs. S.....1035 Northlawn, East Lansing
Sander, Mrs. John.....4275 Dobie Rd., Okemos
Scallin, Mrs. J. J.....301 S. Clemens, Lansing
Schultz, Mrs. Arthur.....4646 Ottawa Dr., Okemos
Shapiro, Mrs. Hyman D.....1236 N. Downer, Lansing
Sharp, Mrs. Mahlon.....950 Audubon Rd., East Lansing
Shaw, Mrs. Milton.....415 West St., Lansing
Sherman, Mrs. George.....504 Cowley, East Lansing
Sichler, Mrs. Harper.....443 Clifton Blvd., East Lansing
Siegel, Mrs. David.....1209 Parkdale Ave., Lansing
Silverman, Mrs. I. E.....1602 Clifton, Lansing
Sleight, Mrs. J. L.....3001 Westchester, Lansing
Smith, Mrs. A. V.....S. Jackson Rd., Mason
Snell, Mrs. Dana M.....312 N. Harrison Rd., East Lansing
Spagnuolo, Mrs. A. J.....2304 Marion Ave., Lansing
Spencer, Mrs. Chas. T.....1134 Southlawn, East Lansing
Spencer, Mrs. P. C.....602 Northlawn, East Lansing
Stanley, Mrs. A. L.....408 Whitehills Dr., East Lansing
Stehman, Mrs. V. A.....4572 Ottawa Dr., Okemos
Steiner, Mrs. A. A.....RFD 3, Grand Ledge
Steiner, Mrs. S. D.....413 Clarendon St., East Lansing
Stiles, Mrs. Frank.....615 Northlawn, East Lansing
Stimson, Mrs. Paul R.....1841 Clark Rd., Rt. 4, Lansing
Stone, Mrs. B. J.....736 Rosewood, East Lansing
Stow, Mrs. Robt. M.....1063 Rosewood, East Lansing
Strauss, Mrs. P. C.....219 N. Logan St., Lansing

Stringer, Mrs. C. J.....1701 W. Kalamazoo St., Lansing
 Sundell, Mrs. Edwin C.....338 Marshall, East Lansing
 Swartz, Mrs. F. C.....500 Kedzie Dr., East Lansing
 Tambllyn, Mrs. F. W.....Waverly Rd., Rt. 3, Lansing
 Thaden, Mrs. D. W.....642 Gunson, East Lansing
 Toothaker, Mrs. K. W.....1609 W. Michigan Ave., Lansing
 Towne, Mrs. L. C.....701 Britten, Lansing
 Trescott, Mrs. R. F.....218 Chesterfield Pkwy.,
 East Lansing
 Trimby, Mrs. Robert.....611 Whitehills, East Lansing
 Troost, Mrs. F. L.....4395 W. Delhi, Holt

VanderZalm, Mrs. T. P.....1452 Cambridge Rd., Lansing
 Venier, Mrs. J. H.....812 Sparrow Ave., Lansing
 Wadley, Mrs. Ralph.....930 Roxburgh, East Lansing
 Wainright, Mrs. J. W.....112 W. Madison, Lansing
 Walker, Mrs. L.....1302 Pershing, Lansing
 Wellman, Mrs. John.....1809 W. Hilldale, Lansing
 Wilensky, Mrs. Thomas.....527 W. Oakwood, East Lansing
 Wiley, Mrs. H. W.....402 N. Jenison, Lansing
 Willson, Mrs. Howard.....435 McPherson St., Lansing
 Wolcott, Mrs. Lester E.....2377 Seminole Dr., Okemos
 Worthington, Mrs. R.....717 Britten St., Lansing

IONIA-MONTCALM COUNTIES

Buck, Mrs. Jack.....118 N. Jefferson St., Ionia
 Campbell, Mrs. R. E.....340 E. Main, Ionia
 Cook, Mrs. George.....649 Riverside Dr., Ionia
 Hoffs, Mrs. M. A.....Eagle Pt., Lake Odessa
 Kopchick, Mrs. Joseph.....Muir
 Minick, Mrs. W. G.....204 Hanover, Belding

Slagh, Mrs. M. E.....188 Main, Saranac
 Smith, Mrs. Robert.....Roselawn Terrace, Ionia
 Socha, Mrs. Edmund.....217 East Main St., Ionia
 Tannheimer, Mrs. John F.....4 Lovell Pl., Ionia
 Tromp, Mrs. John.....Lake Odessa

JACKSON COUNTY

Abraham, Mrs. A. O.....Hudson
 Adams, Mrs. E. W.....749 Oakridge Dr., Jackson
 Ahronheim, Mrs. J. H.....1410 Greenwood Ave., Jackson
 Appel, Mrs. Saul.....808 S. Durand, Jackson
 Baker, Mrs. G. M.....Parma
 Bartholic, Mrs. F. W.....Rte. 1, Rives Junction
 Beckwith, Mrs. S. A.....Stockbridge
 Brashares, Mrs. Z. A.....Brooklyn
 Bullen, Mrs. G. R.....418 Third St., Jackson
 Clarke, Mrs. C. S.....1046 Fourth St., Jackson
 Cook, Mrs. George.....723 Beverly Park, Jackson
 Cooley, Mrs. Charles W.....315 S. Wisner, Jackson
 Cooley, Mrs. R. M.....141 E. Robinson, Jackson
 Corley, Mrs. R. W.....1104 W. Michigan, Jackson
 Cox, Mrs. Ferdinand.....1601 Fourth St., Jackson
 Culver, Mrs. G. D.....Stockbridge
 Daly, Mrs. B.....709 Oakridge Dr., Jackson
 DeMay, Mrs. C. E.....410 DeMay Court, Jackson
 DeMay, Mrs. J. D.....1204 Third, Jackson
 Deming, Mrs. R. C.....746 Union St., Jackson
 Dickman, Mrs. H. M.....Hudson
 Douglas, Mrs. E. W.....924 Cooper, Jackson
 Faust, Mrs. W. L.....Grass Lake
 Filip, Mrs. H. K.....755 W. Michigan, Jackson
 Finton, Mrs. R. E.....1812 Grovedale, Jackson
 Finton, Mrs. Walter L.....1502 Carlton Blvd., Jackson
 Growt, Mrs. B. N.....Addison
 Hackett, Mrs. T. E.....1124 Burr St., Jackson
 Hanft, Mrs. C. F.....Springport
 Hansen, Mrs. V. R.....Chelsea
 Hardie, Mrs. G. C.....218 Fourth, Jackson
 Hicks, Mrs. G. C.....1009 Wildwood Ave., Jackson
 Holst, Mrs. J. B.....1437 Wickwire Rd., Jackson
 Hunt, Mrs. M. R.....2534 Francis St., Jackson
 Joerin, Mrs. W. A.....734 W. Franklin, Jackson
 Karr, Mrs. J. P.....844 Woodbine, Jackson
 Keefer, Mrs. A. H.....Concord
 Kempton, Mrs. George.....745 Crescent Rd., Jackson
 Kiessling, Mrs. A. J.....1850 Schaffer Dr., Jackson
 Kline, Mrs. Starr.....3525 Jefferson Rd., Clark Lake
 Kraft, Mrs. L. C.....Leslie
 Kudner, Mrs. D. F.....1300 W. Franklin, Jackson
 Lake, Mrs. Ed.....786 Bloomfield Blvd., Jackson
 Landron, Mrs. Daniel.....4633 Page, Jackson
 Lenz, Mrs. C. R.....1833 Shoemaker Dr., Jackson
 Lewis, Mrs. E. F.....609 S. Wisner, Jackson
 Linden, Mrs. V. E.....5712 Browns Lake Rd., Jackson
 Ludwick, Mrs. J. E.....6220 Brooklyn Rd., Jackson
 Ludwick, Mrs. John P.....833 Westwood Blvd., Jackson
 McGarvey, Mrs. W. E.....319 S. Higby, Jackson

McLaughlin, Mrs. John.....1609 W. Franklin, Jackson
 McLaughlin, Mrs. M. J.....RFD 1, Brown's Lake Rd.,
 Jackson
 McLauthlin, Mrs. H. B.....200 S. Higby St., Jackson
 Meads, Mrs. J. B.....1714 Fourth St., Jackson
 Medlar, Mrs. B. E.....407 S. Wisner, Jackson
 Medlar, Mrs. R.....1202 West Franklin, Jackson
 Muhich, Mrs. R.....2466 Emmons Rd., Jackson
 Munro, Mrs. C. D.....740 W. Michigan, Jackson
 Munro, Mrs. N. D.....417 Edwards, Jackson
 Murphy, Mrs. B. M.....729 Oakdale, Jackson
 Newton, Mrs. R. E.....3124 Horton Rd., Jackson
 Oleksy, Mrs. S. P.....744 W. Michigan, Jackson
 Olsen, Mrs. Lloyd L.....1410 W. Washington, Jackson
 Otis, Mrs. Grant L.....922 Oakgrove Ave., Jackson
 Parker, Mrs. E. E.....Leslie
 Payne, Mrs. A. K.....914 S. Brown St., Jackson
 Phillips, Mrs. G. H.....326 W. Cortland, Jackson
 Porter, Mrs. H. W.....1008 Carlton Blvd., Jackson
 Pray, Mrs. F. F.....310 Steward Ave., Jackson
 Preston, Mrs. J.....674 Commonwealth St., Jackson
 Rice, Mrs. J. W.....705 Bloomfield Blvd., Jackson
 Ries, Mrs. R. G.....824 Brown's Lake Rd., Jackson
 Riley, Mrs. Philip.....1409 W. Franklin St., Jackson
 Sargent, Mrs. L. E.....114 N. Thompson, Jackson
 Sautter, Mrs. W. A.....Horton
 Schmidt, Mrs. T. E.....1414 W. Washington, Jackson
 Scott, Mrs. J. A.....119 S. Bowen, Jackson
 Shaeffer, Mrs. A. M.....120 S. Durand, Jackson
 Shaeffer, Mrs. Dale.....206 So. Wisner, Jackson
 Sher, Mrs. D. B.....956 Cooper, Jackson
 Sill, Mrs. H. W.....214 S. Durand, Jackson
 Sirhal, Mrs. A. M.....560 N. Shore Dr., Clark Lake
 Smith, Mrs. D. W.....1205 W. Washington, Jackson
 Southwick, Mrs. W. A.....948 Cooper St., Jackson
 Stackable, Mrs. W.....727 Christy Ave., Jackson
 Stewart, Mrs. Lewis L.....220 Summit, Jackson
 Stolberg, Mrs. Carl A.....828 Oakridge Dr., Jackson
 Stone, Mrs. E. L.....1011 S. Brown St., Jackson
 Schruer, Mrs. P. A.....Manchester
 Taylor, Mrs. R. V.....800 S. Grinnell, Jackson
 Thalner, Mrs. L. F.....609 W. Michigan, Jackson
 Thayer, Mrs. E. A.....2018 Spring Arbor Rd., Jackson
 Thompson, Mrs. Tom.....200 Fourth, Jackson
 Torwick, Mrs. E. T.....1107 Union St., Jackson
 Townsend, Mrs. J. W.....108 Hague, Vandercook Lake
 Van Schoick, Mrs. Frank.....1301 Greenwood Ave.,
 Jackson
 Van Schoick, Mrs. John.....Hanove
 Van Wagner, Mrs. F. I.....1232 First St., Jackson

Vivirski, Mrs. E. E.....603 S. Elm, Jackson
 Weddon, Mrs. E. R.....Stockbridge
 Wholihan, Mrs. John.....602 W. Michigan, Jackson

Wickham, Mrs. W. A.....1902 Fourth St., Jackson
 Wille, Mrs. Warren S.....1346 Kathmir Dr., Jackson
 Young, Mrs. Allen.....119 Moore St., Jackson

KALAMAZOO COUNTY

Aach, Mrs. Hugo.....3232 Bronson Blvd., Kalamazoo
 Alexander, Mrs. C. A.....118 W. North, Kalamazoo
 Andrews, Mrs. Sherman.....2326 Springhill Dr., Kalamazoo
 Appel, Mrs. Ben.....516 Monroe, Kalamazoo
 Appel, Mrs. William.....1906 Dorchester, Kalamazoo
 Banner, Mrs. L. R.....Hickory Corners
 Barak, Mrs. Herbert.....2122 Chevy Chase, Kalamazoo
 Barry, Mrs. Manley.....9824 Gull Lake Dr. W., Richland
 Betz, Mrs. Eldean.....1521 Timberlane Dr., Kalamazoo
 Birch, Mrs. W.....1539 Grand Ave., Kalamazoo
 Borgman, Mrs. Wallace.....2252 Chevy Chase, Kalamazoo
 Breneman, Mrs. James.....25 Pearl St., Galesburg
 Brown, Mrs. I. W.....1628 Cambridge Rd., Kalamazoo
 Brue, Mrs. P. P.....1009 Cambridge Dr., Kalamazoo
 Burbidge, Mrs. Earl.....359 Park Ave., Parchment
 Burrell, Mrs. Robert.....2017 Hillsdale Ave., Kalamazoo
 Callander, Mrs. C. G.....4418 Lake Forrest Dr., Kalamazoo
 Cashen, Mrs. Russell.....1716 Royce Ave., Kalamazoo
 Chrest, Mrs. C. P.....2740 Bronson Blvd., Kalamazoo
 Cobb, Mrs. H. R.....3403 Knox Ave., Kalamazoo
 Conrad, Mrs. Maynard.....1509 Timberlane Dr., Kalamazoo
 Cooper, Mrs. Paul.....4326 Oakland Dr., Kalamazoo
 Crane, Mrs. Bart.....420 S. Rose, Kalamazoo
 Crawford, Mrs. Kenneth.....1532 Grand Ave., Kalamazoo
 Creager, Mrs. Ray O.....907 Whetson, Kalamazoo
 Cretsinger, Mrs. Francis.....2012 Chevy Chase, Kalamazoo
 Currier, Mrs. K.....1223 Kilgore Rd., Kalamazoo
 Dana, Mrs. Robert.....2240 Sheffield Dr., Kalamazoo
 Decker, Mrs. Wm.....1145 Oakland Dr., Kalamazoo
 Delbert, Mrs. Stewart G.....410 Edgemoor, Kalamazoo
 DeLong, Mrs. Robt.....2215 Crane, Kalamazoo
 DenBlyker, Mrs. Walter.....513 S. Burdick, Kalamazoo
 DePree, Mrs. H. E.....708 Whites Rd., Kalamazoo
 Dew, Mrs. Robert.....2253 Sheffield Dr., Kalamazoo
 DeWitt, Mrs. Norman.....161 S. Prospect St., Kalamazoo
 Dick, Mrs. Leo.....428 Stuart, Kalamazoo
 Doezema, Mrs. Edward.....802 Grand Pre, Kalamazoo
 Dowd, Mrs. Bennard.....1415 Henderson Dr., Kalamazoo
 Doyle, Mrs. Fred.....3240 Bronson Blvd., Kalamazoo
 Endrei, Mrs. Arisztid.....Box A, State Hosp., Kalamazoo
 Estill, Mrs. Don.....1605 N. Church, Kalamazoo
 Fast, Mrs. Ralph.....1425 Low Rd., Kalamazoo
 Fath, Mrs. August.....5029 Angling Rd., Kalamazoo
 Finton, Mrs. Max.....1418 Kilgore Rd., Kalamazoo
 Flunt, Mrs. Roman.....State Hospital, Kalamazoo
 Fopeano, Mrs. John.....2121 Sheffield Dr., Kalamazoo
 French, Mrs. M.....1128 Miles, Kalamazoo
 Fulkerson, Mrs. Clark.....425 S. Westnedge, Kalamazoo
 Fuller, Mrs. Paul.....115 Carmel, Kalamazoo
 Gerstner, Mrs. Louis.....2425 Law, Kalamazoo
 Gladstone, Mrs. William.....4322 Sunnybrook Dr., Kalamazoo
 Glaser, Mrs. Dan.....141 S. Prairie, Kalamazoo
 Green, Mrs. Wm.....2622 Alta Vista, Kalamazoo
 Grekin, Mrs. Robert.....1522 Southern, Kalamazoo
 Haddock, Mrs. D. A.....4426 Lake Forrest Dr., Kalamazoo
 Hammer, Mrs. John.....121 Monroe, Kalamazoo
 Hanson, Mrs. Curtis.....1207 Maple, Kalamazoo
 Harrell, Mrs. Frank.....120 N. Arlington, Kalamazoo
 Harrelson, Mrs. W. D.....3625 Old Colony Rd., Kalamazoo
 Hayner, Mrs. Russell.....718 Royce, Kalamazoo
 Heersma, Mrs. H. S.....1923 Winchell, Kalamazoo
 Heinle, Mrs. Robert.....2517 Bronson Blvd., Kalamazoo
 Herbert, Mrs. Walter.....2777 Highland Park., Richland
 Hersey, Mrs. E. Freeman.....4407 Bronson Blvd., Kalamazoo
 Hildreth, Mrs. Roscoe.....226 Grandview, Kalamazoo
 Jodgman, Mrs. A. B.....1601 Grand, Kalamazoo

Hoebeke, Mrs. W. G.....1408 Long Rd., Kalamazoo
 Holder, Mrs. C. O.....1207 Oakland Dr., Kalamazoo
 Howard, Mrs. Grant.....2025 Chevy Chase, Kalamazoo
 Howard, Mrs. W. H.....1602 Gull Rd., Kalamazoo
 Hubbell, Mrs. R. J.....3538 Bronson Blvd., Kalamazoo
 Irwin, Mrs. Wm.....2333 Sheffield Dr., Kalamazoo
 Jackson, Mrs. H.....1224 Hillcrest, Kalamazoo
 Jennings, Mrs. Robert.....814 Oakland Dr., Kalamazoo
 Jennings, Mrs. W. O.....1136 Long Rd., Kalamazoo
 Kavanaugh, Mrs. Wm.....1412 Vale View, Kalamazoo
 Kercher, Mrs. Ervin.....1211 Cherry St., Kalamazoo
 Kilgore, Mrs. Robert.....5140 Morningside Dr., Kalamazoo
 Klerk, Mrs. Wm.....2421 Waite, Kalamazoo
 Koestner, Mrs. P.....742 Norton Dr., Kalamazoo
 Lavender, Mrs. Howard.....605 Norton Dr., Kalamazoo
 Lawrence, Mrs. James.....1409 Henderson Dr., Kalamazoo
 Lemmer, Mrs. Richard.....2933 Bronson Blvd., Kalamazoo
 Littig, Mrs. John.....1708 Embury Rd., Kalamazoo
 Locklin, Mrs. W.....4444 Lake Forest Dr., Kalamazoo
 Loynd, Mrs. James.....4041 Hillandale, Kalamazoo
 MacDonald, Mrs. Marshall.....2824 Hill 'N' Brook, Kalamazoo
 MacGregor, Mrs. John.....226 Church, Parchment
 Machin, Mrs. Harold.....2348 Tipperary Rd., Kalamazoo
 Malone, Mrs. James.....3731 Bronson Blvd., Kalamazoo
 Margolis, Mrs. Fred.....2134 Waite Ave., Kalamazoo
 Marshall, Mrs. Don.....2344 Sheffield Dr., Kalamazoo
 Marshall, Mrs. Wm.....160 Edgemoor, Kalamazoo
 Martens, Mrs. Irwin.....517 Sturgis Rd., Parchment
 May, Mrs. Donald.....1327 Maple, Kalamazoo
 McCarthy, Mrs. J. S.....1005 Oakland Dr., Kalamazoo
 McManus, Mrs. James.....1416 Academy, Kalamazoo
 Mellis, Mrs. R. T.....2833 Grace, Kalamazoo
 Moe, Mrs. Rex.....4011 Hillandale Dr., Kalamazoo
 Morter, Mrs. R. A.....2421 Sheffield, Kalamazoo
 Neerkin, Mrs. A. John.....1326 Hillandale, Kalamazoo
 Nibbelink, Mrs. Benjamin.....2149 Treehaven Dr., Kalamazoo
 Nicholson, Mrs. Robert.....1925 Cambridge Dr., Kalamazoo
 O'Donovan, Mrs. C. J.....1562 Spruce, Kalamazoo
 Overbey, Mrs. Chas., Jr.....Kalamazoo State Hosp., Kalamazoo
 Patmos, Mrs. Martin.....1207 Cherry, Kalamazoo
 Peake, Mrs. Charles.....4316 Bronson Blvd., Kalamazoo
 Pearson, Mrs. Edwin.....933 W. Inkster, Kalamazoo
 Peelen, Mrs. Matthew.....156 Monroe, Kalamazoo
 Peelen, Mrs. Wm.....943 W. Inkster, Kalamazoo
 Perry, Mrs. C. W.....2030 Waite, Kalamazoo
 Pinkham, Mrs. Raymond.....1203 Miles, Kalamazoo
 Pullon, Mrs. Alton.....3114 Bronson Blvd., Kalamazoo
 Rasmussen, Mrs. Leo.....205 N. Michigan, Vicksburg
 Rigerink, Mrs. Gerald.....2424 S. Park, Kalamazoo
 Roberts, Mrs. M. S.....118 Bulkley, Kalamazoo
 Rockwell, Mrs. D.....1227 Jefferson, Kalamazoo
 Rogers, Mrs. R. J.....108 Mill St., Vicksburg
 Rutherford, Mrs. Paul.....106 Thompson, Kalamazoo
 Ryan, Mrs. F. C.....2511 Glenwood Dr., Kalamazoo
 Scholten, Mrs. Roger.....930 W. Inkster, Kalamazoo
 Schrier, Mrs. C. M.....1223 Oakland Dr., Kalamazoo
 Scott, Mrs. Wm.....2315 Angling Rd., Kalamazoo
 Siemsen, Mrs. W. J.....3424 Old Colony Rd., Kalamazoo
 Sisk, Mrs. W. M.....2421 Outlook, Kalamazoo
 Slatmeyer, Mrs. Karel.....118 S. Prairie, Kalamazoo
 Smith, Mrs. T. C.....1215 Oakland Dr., Kalamazoo
 Sofen, Mrs. M. B.....901 Edgemoor, Kalamazoo
 Southworth, Mrs. Maynard.....Schoolcraft
 Stewart, Mrs. Wm.....4419 Lake Forest Dr., Kalamazoo
 Stiller, Mrs. Anthony.....1235 N. Hillandale Dr., Kalamazoo

Stryker, Mrs. Homer.....903 Edgemoor, Kalamazoo
 Talley, Mrs. Robert.....6603 Mastenbrook Dr., Kalamazoo
 Upjohn, Mrs. E. Gifford..2230 Glenwood Dr., Kalamazoo
 Vander Velde, Mrs. Kenneth..2203 Sheffield, Kalamazoo
 Verhage, Mrs. M. D.....1748 Greenlawn Ave., Kalamazoo
 Volderauer, Mrs. John....905 Edgemoor Ave., Kalamazoo

Warnke, Mrs. R. D.....3012 Kenilworth, Kalamazoo
 Weadon, Mrs. P.....2255 Tipperary, Kalamazoo
 Wickliffe, Mrs. Robert.....2226 Sheffield, Kalamazoo
 Williamson, Mrs. Edwin.....6343 Douglas, Kalamazoo
 Wu, Mrs. J. F.....3719 Duke St., Kalamazoo
 Youngs, Mrs. C. A.....416 S. Burdick, Kalamazoo

KENT COUNTY

Aitkin, Mrs. Geo. T.....936 Santa Lucia Dr., S.E.,
 Grand Rapids
 Albers, Mrs. G. Donald.....1838 Argentina Dr. S.E.,
 Grand Rapids
 Aldridge, Mrs. Charles.....1574 Mackinaw Rd. S.E.,
 Grand Rapids
 Andre, Mrs. Harvey M.....950 Cambridge S.E.,
 Grand Rapids
 Ballard, Mrs. M. S.....9 College N.E., Grand Rapids
 Balyeat, Mrs. Gordon W.....150 Morningside Dr. S.E.,
 Grand Rapids
 Barofsky, Mrs. Gerald F.....2944 Hall S.E., Grand Rapids
 Bartek, Mrs. Gordon..1115 Kenesaw S.E., Grand Rapids
 Bassinger, Mrs. Clair E.....420 Rosewood S.E.,
 Grand Rapids
 Batts, Mrs. Martin.....246 Aurora S.E., Grand Rapids
 Baum, Mrs. Wm.....255 Lakeside Dr. S.E.,
 East Grand Rapids
 Beaton, Mrs. James H.....1556 Pontiac Rd. S.E.,
 Grand Rapids
 Beeman, Mrs. Carl B.....3040 Bornnell S.E., Grand Rapids
 Beets, Mrs. W. C.....2221 Jefferson Dr. S.E.,
 Grand Rapids
 Bell, Mrs. C. M.....3121 Oakhollow Dr. S.E.,
 Grand Rapids
 Benjamin, Mrs. Howard.....500 Cambridge S.E.,
 Grand Rapids
 Bennett, Mrs. W. Bruce.....1015 Rosalie N.W.,
 Grand Rapids
 Benson, Mrs. Roland R.....1578 Pontiac S.E.,
 Grand Rapids
 Bignall, Mrs. Rex.....1134 Conlon S.E., Grand Rapids
 Blackburn, Mrs. H. M.....2401 Breton Rd. S.E.,
 Grand Rapids
 Blocksma, Mrs. Ralph.....1529 Blythecourt N.W.,
 Grand Rapids
 Boelkins, Mrs. Richard C.....834 Giddings S.E.,
 Grand Rapids
 Boerman, Mrs. Walter..848 Madison S.E., Grand Rapids
 Boersma, Mrs. Donald.....920 Chippewa Dr. S.E.,
 Grand Rapids
 Boet, Mrs. John T.....2739 Maplewood S.E.,
 Grand Rapids
 Bonzelaar, Mrs. Marvin.....1612 Woodward S.E.,
 Grand Rapids
 Booher, Mrs. Craig.....2609 Albert Dr. S.E.,
 Grand Rapids
 Bosch, Mrs. Leon C.....943 Santa Barbara Dr. S.E.,
 Grand Rapids
 Bowman, Mrs. Harold E.....2209 Wilshire S.E.,
 Grand Rapids
 Boyce, Mrs. David C.....2310 Estelle Dr. S.E.,
 Grand Rapids
 Brace, Mrs. Fred C.....2311 Academy Dr. N.E.,
 Grand Rapids
 Braunschneider, Mrs. G. E.....2231 Clover Dr. N.W.,
 Grand Rapids
 Brink, Mrs. J. Russell.....1901 Argentina Dr. S.E.,
 Grand Rapids
 Brook, Mrs. J. D.....65 S. Wilson Ave., Grandville
 Bull, Mrs. Frank.....65 S. State St., Sparta
 Burroughs, Mrs. Frank, Jr.....159 S. Ottawa, Grandville
 Butler, Mrs. Wm. J.....705 N. Alvernon Way,
 Tucson, Arizona
 Capps, Mrs. Samuel....2059 Wilshire S.E., Grand Rapids

Carpenter, Mrs. Luther C.....1818 Argentina Dr. S.E.,
 Grand Rapids
 Caukin, Mrs. Howard.....1310 Woodcliff S.E.,
 Grand Rapids
 Cayce, Mrs. William..640 Kent Hills Rd., Grand Rapids
 Champion, Mrs. John.....2222 Englewood S.E.,
 Grand Rapids
 Chandler, Mrs. Donald.....3347 E. Belt Line N.E.,
 Grand Rapids
 Chase, Mrs. R. J.....849 Maxwell S.E., Grand Rapids
 Clahassey, Mrs. Erwin G.....427 Mulford Dr. S.E.,
 Grand Rapids
 Clawson, Mrs. Carroll.....748 Ethel S.E., Grand Rapids
 Claytor, Mrs. Robert W.....2032 Coit N.E., Grand Rapids
 Collins, Mrs. William T.....2934 Woodcliff S.E.,
 Grand Rapids
 Colvin, Mrs. W. G.....7830 Valhalla Dr., Dutton
 Corbus, Mrs. Burton R.....325 Union S.E., Grand Rapids
 Crane, Mrs. Harold.....2221 Madison S.E., Grand Rapids
 Cremer, Mrs. John.....1415 Ironwood, Marne
 Crissman, Mrs. Richard K.....7525 Alaska S.E.,
 Caledonia
 Cuncannon, Mrs. Edward M.....1745 Eastern S.E.,
 Grand Rapids
 Currier, Mrs. Fred P.....955 Floral Dr. S.E.,
 Grand Rapids
 Damstra, Mrs. Harold J.....1022 Santa Cruz Dr. S.E.,
 Grand Rapids
 Dassel, Mrs. Paul M.....2641 Boston S.E., Grand Rapids
 Davis, Mrs. David B.....266 Pettis Rd., Ada
 Dawson, Mrs. W. Douglas.....1021 Iroquois Dr. S.E.,
 Grand Rapids
 DeBoer, Mrs. C. J.....191 Elwood, Grandville
 DeBoer, Mrs. Guy W.....41 Maryland N.E.,
 Grand Rapids
 DeMaagd, Mrs. Gerald.....185 S. Monroe, Rockford
 DeMol, Mrs. Richard J.....2425 College S.E.,
 Grand Rapids
 Denham, Mrs. Robert H.....535 Plymouth Dr. S.E.,
 Grand Rapids
 DePree, Mrs. Joe.....849 Pinecrest S.E., Grand Rapids
 DeVel, Mrs. Leon.....739 Plymouth Dr. S.E.,
 Grand Rapids
 DeVries, Mrs. Daniel...82 Maryland S.E., Grand Rapids
 Dewey, Mrs. K. A.....3205 Bonnell Dr. S.E.,
 Grand Rapids
 Diskey, Mrs. Donald G...1911 Lake Michigan Dr. N.W.,
 Grand Rapids
 Dixon, Mrs. W. L.....420 Fulton E., Grand Rapids
 Dixon, Mrs. Willis L.....2335 Boston St. S.E.,
 Grand Rapids
 Doctor, Mrs. Luebert.....3496 Lake Dr. S.E.,
 Grand Rapids
 Doyle, Mrs. John L.....2438 Paris S.E., Grand Rapids
 Droste, Mrs. James C.....1545 Seminole Rd. S.E.,
 Grand Rapids
 Dyer, Mrs. David.....550 Morris S.E., Grand Rapids
 Eaton, Mrs. Robert M.....243 Aurora S.E., Grand Rapids
 Eckmann, Mrs. Bertram..700 Fuller N.E., Grand Rapids
 Eggleston, Mrs. H. R.....117 Page N.E., Grand Rapids
 Eldersveld, Mrs. H. C.....977 Powers N.W., Grand Rapids
 Failing, Mrs. John F.....2617 Lake Michigan Dr. N.W.,
 Grand Rapids
 Farber, Mrs. Charles E.....2930 Bonnell S.E.,
 Grand Rapids

Faust, Mrs. Lawrence W.....405 Manhattan Rd. S.E., Grand Rapids	Jaracz, Mrs. Walter J., Jr.....1561 Alexander S.E., Grand Rapids
Feldhaus, Mrs. Henry.....2419 Berwyck Rd. S.E., Grand Rapids	Jarvis, Mrs. Chas.....218 Sligh Blvd. N.E., Grand Rapids
Fellows, Mrs. Kenneth F.....3341 Ashton Rd. S.E., Grand Rapids	Jellema, Mrs. John F.....1842 Houseman N.E., Grand Rapids
Ferguson, Mrs. James.....2230 Hall S.E., Grand Rapids	Jensen, Mrs. William B.....3147 Bonnell S.E., Grand Rapids
Ferguson, Mrs. Lynn A.....635 Cambridge S.E., Grand Rapids	Johns, Mrs. Donald.....655 Broadview S.E., Grand Rapids
Ferguson, Mrs. Ward S.....2117 Hall S.E., Grand Rapids	Johnston, Mrs. W. L.....1047 Gladstone S.E., Grand Rapids
Ferrand, Mrs. Louis G.....119 N. Monroe, Rockford	Jones, Mrs. Horace.....3004 Oakwood Dr. S.E., Grand Rapids
Fitts, Mrs. Ralph L.....1930 Michigan Rd. N.E., Grand Rapids	Kenney, Mrs. Leo J.....3855 Filkins Dr. N.E., Grand Rapids
Fitzgerald, Mrs. Erwin L.....2005 Hall S.E., Grand Rapids	Kessler, Mrs. Dale L.....1610 Robinson Rd. S.E., Grand Rapids
Flynn, Mrs. J. Donald.....1034 Santa Barbara S.E., Grand Rapids	Kingma, Mrs. J. G.....935 Calvin S.E., Grand Rapids
Flintoff, Mrs. William.....720 Ethel Ave S.E., Grand Rapids	Klaus, Mrs. C. D.....214 Bristol N.W., Grand Rapids
Foshee, Mrs. J. C.....315 Madison S.E., Grand Rapids	Kniskern, Mrs. Paul W.....1555 Edgewood S.E., Grand Rapids
Frantz, Mrs. Charles H., Jr.....1860 Lake Dr. S.E., Grand Rapids	Kooistra, Mrs. Henry P.....1564 Pontiac Rd. S.E., Grand Rapids
Fuller, Mrs. E. H.....260 Paris S.E., Grand Rapids	Kool, Mrs. B. P.....419 Comstock N.E., Grand Rapids
Fuller, Mrs. William J.....2633 Frederick Dr. S.E., Grand Rapids	Kreulen, Mrs. Henry.....2452 Godwin Ave. S.E., Grand Rapids
Gamm, Mrs. Kenneth E.....456 Morris S.E., Grand Rapids	Kruse, Mrs. William.....2225 Wilshire S.E., Grand Rapids
Gibbs, Mrs. Floyd.....155 Maryland S.E., Grand Rapids	Lamberts, Mrs. Austin.....1520 Leffingwell N.E., Grand Rapids
Gilbert, Mrs. R. H.....1125 San Jose S.E., Grand Rapids	Landstra, Mrs. Robert.....1243 Fisk S.E., Grand Rapids
Gillett, Mrs. Frederick.....755 San Jose S.E., Grand Rapids	Lang, Mrs. Ramon.....2958 Hall S.E., Grand Rapids
Good, Mrs. C. R.....2111 Buttrick S.E., Ada	Lanning, Mrs. Nicholas.....1050 Gladstone S.E., Grand Rapids
Gouwens, Mrs. Willis E.....2835 Coit N.E., Grand Rapids	Lentini, Mrs. Joseph R.....2059 Anderson Dr. S.E., Grand Rapids
Grant, Mrs. Lee O.....1464 Burke N.E., Grand Rapids	Lewis, Mrs. Geo.....30 Manchester Rd. S.W., Grand Rapids
Grass, Mrs. E. J.....858 Pinecrest S.E., Grand Rapids	Lieffers, Mrs. Harry.....331 Aurora S.E., Grand Rapids
Gray, Mrs. Fred B.....2333 Oakwood S.E., Grand Rapids	Lillie, Mrs. Walter.....1038 Pinecrest S.E., Grand Rapids
Griffith, Mrs. Lucian S.....1934 Sherman S.E., Grand Rapids	List, Mrs. Carl F.....401 Lakeside Dr. S.E., Grand Rapids
Gunn, Mrs. James A.....1065 San Lucia S.E., Grand Rapids	MacDonell, Mrs. James.....185 Maryland N.E., Grand Rapids
Gunning, Mrs. R. E. Lee.....1960 Michigan N.E., Grand Rapids	MacIntyre, Mrs. Dugald.....562 Plymouth S.E., Grand Rapids
Haack, Mrs. William.....1225 Franklin S.E., Grand Rapids	Mann, Mrs. Joseph D.....3435 Beechwood Dr. S.E., Grand Rapids
Hagerman, Mrs. David B.....1551 Seminole S.E., Grand Rapids	Marsh, Mrs. John P.....1231 Sigsbee S.E., Grand Rapids
Hamp, Mrs. A.....1059 Eastwood S.E., Grand Rapids	Martinus, Mrs. Martin.....525 Overbrook S.E., Grand Rapids
Heetderks, Mrs. Dewey R.....240 Edgehill Dr. S.E., Grand Rapids	McCormick, Mrs. John K.....401 Cheshire Dr. N.E., Grand Rapids
Hesselscherdt, Mrs. D. W.....932 Floral S.E., Grand Rapids	McDougal, Mrs. William J.....639 Kent Hills N.E., Grand Rapids
Hodgen, Mrs. John T.....2320 Fulton Rd. E., Grand Rapids	McKenna, Mrs. Joseph L.....1525 Edgewood Dr. S.E., Grand Rapids
Hoekstra, Mrs. A. L.....1812 Kreiser S.E., Grand Rapids	Meade, Mrs. Richard H.....759 San Jose S.E., Grand Rapids
Holcomb, Mrs. J. Winslow.....1441 Breton Rd. S.E., Grand Rapids	Meeuwesen, Mrs. Bernard.....664 Winchell S.E., Grand Rapids
Hollander, Mrs. Stephan.....2027 Godwin S.E., Grand Rapids	Mehney, Mrs. G. H.....3530 Cascade Rd. S.E., Grand Rapids
Hoogerhyde, Mrs. Jack.....3355 Ashton Rd. S.E., Grand Rapids	Miller, Mrs. J. Duane.....2565 Frederick Dr. S.E., Grand Rapids
Houghton, Mrs. R. C.....525 Glenwood S.E., Grand Rapids	Miller, Mrs. J. J.....1580 Water, Marne
Hudson, Mrs. H.....1540 Woodlawn S.E., Grand Rapids	Moberg, Mrs. Carl.....2228 Madison S.E., Grand Rapids
Hufford, Mrs. Alvin R.....2660 Oakwood S.E., Grand Rapids	Moleski, Mrs. Joseph V.....1911 Hall S.E., Grand Rapids
Humphrey, Mrs. James C.....1134 Cambridge S.E., Grand Rapids	Moleski, Mrs. Leo T.....1462 Milton S.E., Grand Rapids
Hydrick, Mrs. Robert.....2013 Hamstead N.W., Grand Rapids	Moleski, Mrs. Stanley.....1701 Pontiac Rd. S.E., Grand Rapids
Hyland, Mrs. William A.....2833 Bonnell S.E., Grand Rapids	Moll, Mrs. A. M.....3383 Fulton Rd. S.E., Grand Rapids
Ireland, Mrs. H. D.....700 Fuller N.E., Grand Rapids	Moore, Mrs. Douglas.....1862 Sherman S.E., Grand Rapids
Irwin, Mrs. Thomas C.....325 Morris S.E., Grand Rapids	Mulder, Mrs. G. Arthur.....2047 Jefferson Dr. S.E., Grand Rapids
Jack, Mrs. William.....507 Plymouth S.E., Grand Rapids	
Jameson, Mrs. Fred.....2711 Beechwood S.E., Grand Rapids	
Jaracz, Mrs. Walter J., Sr.....36 Valley S.E., Grand Rapids	

Mulder, Mrs. J. D.....3161 Baker Dr. S.E.,
Grand Rapids
Murphy, Mrs. Miles.....1050 Monterey S.E.,
Grand Rapids
Nanzig, Mrs. Reinard.....824 Chippewa Dr. S.E.,
Grand Rapids
Northouse, Mrs. Peter B.....1524 Pontiac Rd. S.E.,
Grand Rapids
Notier, Mrs. Victor A.....2601 Maplewood Dr. S.E.,
Grand Rapids
Oliver, Mrs. W. W.....7241 Belding Rd. N.E., Rockford
Overbeek, Mrs. Ernest.....458 Mae-Thv S.E.,
Grand Rapids
Paalman, Mrs. Russel.....497 Marywood Dr. N.E.,
Grand Rapids
Patterson, Mrs. P. W.....2032 Godwin S.E.,
Grand Rapids
Payne, Mrs. C. Allen.....1289 Perkins N.E.,
Grand Rapids
Pearson, Mrs. Glenn.....519 Greenwood S.E.,
Grand Rapids
Pedden, Mrs. John.....230 El Centro Blvd. S.E.,
Grand Rapids
Pilling, Mrs. Warren C.....936 Orchard S.E.,
Grand Rapids
Plekker, Mrs. J. D.....1115 Cadillac Dr. S.E.,
Grand Rapids
Porter, Mrs. Howard P.....180 Greenwich N.E.,
Grand Rapids
Posthuma, Mrs. Albert.....2247 College S.E.,
Grand Rapids
Pott, Mrs. Abraham L.....612 Kent Hills Rd. N.E.,
Grand Rapids
Prothro, Mrs. Winston.....465 Cheshire Dr. N.E.,
Grand Rapids
Puite, Mrs. Robert.....1039 San Juan S.E.,
Grand Rapids
Pyle, Mrs. Henry J.....1016 Waltham S.E.,
Grand Rapids
Ralph, Mrs. L. Paul.....953 Rosewood S.E.,
Grand Rapids
Rasmussen, Mrs. R. A.....737 Cambridge S.E.,
Grand Rapids
Reed, Mrs. Torrence..1058 Orchard S.E., Grand Rapids
Reus, Mrs. Wm.....334 Hobart S.E., Grand Rapids
Riekse, Mrs. James M.....437 Hoyt S.E., Grand Rapids
Rigterink, Mrs. John W.....1291 Cambridge S.E.,
Grand Rapids
Riley, Mrs. George L.....1651 Stoddard N.E.,
Grand Rapids
Ringenberg, Mrs. J. C.....1736 Cambridge Blvd. S.E.,
Grand Rapids
Robb, Mrs. Charles....977 Gladstone S.E., Grand Rapids
Robbert, Mrs. John H.....3813 Omaha S.E., Grandville
Rodgers, Mrs. William L.....2865 Lakedrive S.E.,
Grand Rapids
Rooks, Mrs. Wendell....1158 Nixon N.W., Grand Rapids
Roosenberg, Mrs. William.....2903 Coit N.E.,
Grand Rapids
Rosenzweig, Mrs. Leonard.....315 Benjamin S.E.,
Grand Rapids
Roth, Mrs. Emil.....2414 Fulton E., Grand Rapids
Ryan, Mrs. John.....1707 Wealthy S.E., Grand Rapids
Sanders, Mrs. Jack F.....1184 Griswold S.E.,
Grand Rapids
Schaubel, Mrs. Howard J.....728 Cambridge Blvd. S.E.,
Grand Rapids
Schlosser, Mrs. Ralph.....1922 Emerald N.E.,
Grand Rapids
Schneider, Mrs. Geo. R.....934 Rosewood S.E.,
Grand Rapids
Schumacher, Mrs. E. E.....2456 Beechwood S.E.,
Grand Rapids
Scott, Mrs. Wm. B.....1300 Benjamin S.E.,
Grand Rapids
Seime, Mrs. Reuben....617 Plymouth S.E., Grand Rapids

Sevensma, Mrs. E. S.....2114 Anderson Dr. S.E.,
Grand Rapids
Sevensma, Mrs. Eugene S.....2255 Riverside Dr. N.E.,
Grand Rapids
Sevey, Mrs. L. E.....1145 Benjamin S.E., Grand Rapids
Shellman, Mrs. M. W.....3152 Brentwood Dr. S.E.,
Grand Rapids
Sidell, Mrs. Richard H.....927 Princeton S.E.,
Grand Rapids
Siebers, Mrs. B. H.....988 Maryland N.E., Grand Rapids
Slemons, Mrs. C. C.....530 Morris S.E., Grand Rapids
Sluyter, Mrs. J. S.....839 Iroquois S.E., Grand Rapids
Smith, Mrs. A. B.....1434 Byron S.E., Grand Rapids
Smith, Mrs. Dean B.....2501 Maplewood S.E.,
Grand Rapids
Smith, Mrs. R. B.....1529 Burton S.E., Grand Rapids
Smith, Mrs. R. Earle..129 Lafayette N.E., Grand Rapids
Snapp, Mrs. Carl F.....314 Madison S.E., Grand Rapids
Snyder, Mrs. C. H.....3250 O'Brien Rd. S.W.,
Grand Rapids
Southwick, Mrs. G. H.....1935 SanLuRae S.E.,
Grand Rapids
Steffensen, Mrs. W. H.....443 Plymouth S.E.,
Grand Rapids
Stonehouse, Mrs. G. G.....208 Pioneer Rd. S.E.,
Grand Rapids
Stoneman, Mrs. Fernley.....40 E. Prairie, Grandville
Stover, Mrs. V. A.....860 Gladstone S.E., Grand Rapids
Sugiyama, Mrs. T.....1006 Hollywood N.E.,
Grand Rapids
Swanson, Mrs. A. B.....1722 Breton S.E., Grand Rapids
Swenson, Mrs. H. C.....1734 Adams S.E., Grand Rapids
Ten Have, Mrs. John.....3515 Briggs Blvd. N.E.,
Grand Rapids
Tesseine, Mrs. A. J.....425 Cambridge Blvd. S.E.,
Grand Rapids
Teusink, Mrs. Harvey.....39 W. Beech St., Cedar Springs
Thompson, Mrs. Edward C.....1401 Breton Rd. S.E.,
Grand Rapids
Thompson, Mrs. F. D.....333 Gladstone S.E.,
Grand Rapids
Thomson, Mrs. John W.....2029 Hall S.E., Grand Rapids
Tidey, Mrs. M. B.....261 College S.E., Grand Rapids
Tiffany, Mrs. Joseph C.....2322 Jefferson S.E.,
Grand Rapids
Torgerson, Mrs. William R.....536 Belvedere Dr. S.E.,
Grand Rapids
Truog, Mrs. Clarence P.....1470 Briarcliff Dr. S.E.,
R.R. 3, Grand Rapids
Uthoff, Mrs. Carl.....2253 Foster N.E., Grand Rapids
Van Bree, Mrs. Raymond.....1521 Ridgewood S.E.,
Grand Rapids
VanDenBerg, Mrs. Allison....1120 Cambridge Blvd. S.E.,
Grand Rapids
VandenBerg, Mrs. Henry J.....2933 Bonnell S.E.,
Grand Rapids
VandenBerg, Mrs. William.....2094 Wealthy S.E.,
Grand Rapids
VanderMoln, Mrs. John.....1469 Burke N.E.,
Grand Rapids
VanderPloog, Mrs. William.....1343 Fuller S.E.,
Grand Rapids
VanderVeer, Mrs. Corwin G.....841 Edna S.E.,
Grand Rapids
Van Duine, Mrs. H. J.....414 Brookside Dr. S.E.,
Grand Rapids
Van Goor, Mrs. Kornelius.....2547 Willard S.E.,
Grand Rapids
Van Noord, Mrs. G. A.....6850 Division S., Grand Rapids
Van Portfliet, Mrs. Paul.....555 Mulford S.E.,
Grand Rapids
VanSolkema, Mrs. Andrew.....2155 Romance N.E.,
Grand Rapids
Van Woerkom, Mrs. Daniel....1946 Lake Michigan D
N.W., Grand Rapids
Van Zwalenburg, Mrs. B. R.....2054 Anderson Dr. S.E.,
Grand Rapids

Veldman, Mrs. H. E.....2447 Oakwood N.E.,
Grand Rapids
Venema, Mrs. Jay R.....540 Overbrook S.E.,
Grand Rapids
Vining, Mrs. Keats, Jr.....934 Princeton S.E.,
Grand Rapids
Wadlund, Mrs. Robert.....557 Glenwood S.E.,
Grand Rapids
Wahby, Mrs. Elmer J.....2127 Wilshire S.E.,
Grand Rapids
Waterman, Mrs. Donald F.....4221 Edinburgh S.E.,
Grand Rapids
Weller, Mrs. Keith E.....1125 Orchard Ave. N.E.,
Grand Rapids
Wells, Mrs. Merrill.....3346 Colt Rd. N.E., Grand Rapids
Venger, Mrs. A. Verne.....132 Grand N.E., Grand Rapids
Venger, Mrs. John N.....Coopersville

Westerhof, Mrs. R.....1038 Lake Grove S.E.,
Grand Rapids
Whittenberger, Mrs. Robert.....1164 Griswold S.E.,
Grand Rapids
Wiarda, Mrs. Roy J.....3347 Eastern N.E., Grand Rapids
Wiese, Mrs. John.....3200 Bonnell S.E., Grand Rapids
Wilkes, Mrs. John B.....311 Aurora S.E., Grand Rapids
Williams, Mrs. John R.....2059 College S.E.,
Grand Rapids
Willits, Mrs. P. W.....337 Manhattan S.E., Grand Rapids
Winter, Mrs. G. E.....2316 Jefferson Dr. S.E.,
Grand Rapids
Wurz, Mrs. J. F.....201 Norwood S.E., Grand Rapids
Wygarden, Mrs. Martin.....1947 Hutchinson S.E.,
Grand Rapids
Yared, Mrs. J. A.....1901 Lake Dr. S.E., Grand Rapids
Yegge, Mrs. John.....Kent City
Zwemer, Mrs. Rodger L.....1420 Rossman S.E.,
Grand Rapids

LAPEER COUNTY

Ausum, Mrs. J. D.....545 Bancroft, Imlay City
Baruch, Mrs. Leon.....New Orleans, La.
Bishop, Mrs. Clare.....Almont
Buchanan, Mrs. Thomas Kay.....290 S. Almont Ave.,
Imlay City
Burley, Mrs. David.....Almont
Chapin, Mrs. Clarence.....Pine St., Columbiaville
Conaway, Mrs. Charles.....746 N. Monroe St., Lapeer
Des Jardens, Mrs. Elaine.....307 Washington St., Lapeer
Dorland, Mrs. Clarke.....211 Lincoln St., Lapeer
Doty, Mrs. James R.....1335 N. Monroe, Lapeer

Heitsch, Mrs. William.....892 S. Saginaw, Lapeer
Hunter, Miss Mary Ellen.....1091 Pine St., Lapeer
Hunter, Miss Frances.....1091 Pine St., Lapeer
Kiehle, Mrs. Anna.....706 N. Main St., Lapeer
McBride, Mrs. John R.....914 Liberty, Lapeer
Smith, Mrs. Glenn.....6552 Imlay City Rd., Imlay City
Snowman, Mrs. Lynna.....306 N. Main, Lapeer
Thomas, Mrs. Orville.....North Branch
Thompson, Mrs. May.....243 Clay St., Lapeer
Zemmer, Mrs. Harry.....Hannamon Rd., Columbiaville
Zolliker, Mrs. Carl.....State Home, Lapeer

LENAWEE COUNTY

Abraham, Mrs. A. O.....305 S. Church, Hudson
Benz, Mrs. Carl A.....Rt. 4, Adrian
Berghuis, Mrs. John.....347 Budlong St., Adrian
Blenden, Mrs. Merwin R.....5140 East Monroe Rd.,
Tecumseh
Claxton, Mrs. W. T.....136 W. Chicago, Britton
Cook, Mrs. C. L.....740 North Union St., Tecumseh
Cook, Mrs. Richard D.....308 W. Chicago Blvd.,
Tecumseh
Dustin, Mrs. R. E.....309 North Union St., Tecumseh
Eddy, Mrs. H. R. C.....349 South Main St., Adrian
Fitzsimmons, Mrs. F. J.....380 Westwood Dr., Adrian
Gamble, Mrs. Kenneth.....R.F.D., Hudson
Hammel, Mrs. H. H.....108 N. Union, Tecumseh

Hammel, Mrs. Richard T.....611 N. Evans St., Tecumseh
Heizerman, Mrs. R. F.....612 W. Chicago Blvd.,
Tecumseh
Hinshaw, Mrs. Warren.....950 Riverside, Adrian
Marsh, Mrs. R. G. B.....610 W. Logan St., Tecumseh
Miller, Mrs. Lynford.....17 Westwood Dr., Adrian
O'Connor, Mrs. Archie.....122 Locust, Clinton
Parker, Mrs. Donald A.....454 S. Main St., Adrian
Phelan, Mrs. A. J.....405 Seneca, Tecumseh
Rogers, Mrs. J. D.....1232 W. Maple Ave., Adrian
Sarapo, Mrs. Donato.....978 W. Maumee, Adrian
Sayre, Mrs. P. P.....228 S. Main St., Onsted
Stewart, Mrs. Landis.....214 E. Butler, Adrian
Wilson, Mrs. George.....108 Jackson Rd., Clinton

LIVINGSTON COUNTY

Barton, Mrs. T. A.....100 Lucy Rd., Howell
Clarke, Mrs. Niles.....723 Spencer Rd., Brighton
Hauer, Mrs. R. F.....Fowlerville
Hendren, Mrs. J. J.....Fowlerville
Hill, Mrs. H. C.....320 Madison St., Howell
Huntington, Mrs. H. G.....219 S. Walnut St., Howell

Johnson, Mrs. Edwin.....Howell
May, Mrs. Louis.....Riddle St., Howell
McGregor, Mrs. A. J.....995 E. Main St., Brighton
Polack, Mrs. Robert.....Fowler St., Howell
Sigler, Mrs. Hollis.....309 N. Michigan, Howell
Walker, Mrs. E. G.....4485 Cordley Lake Rd., Lakeland
Woodworth, Mrs. Edwin.....422 S. Lake, Howell

MACOMB COUNTY

Banting, Mrs. Oswald F.....Main St., Richmond
Barker, Mrs. J. G.....22420 Statler Blvd., St. Clair Shores
Bower, Mrs. Allen B.....Armada
Bratrud, Mrs. Theo.....64 Riverside, Mt. Clemens
Bryce, Mrs. James W.....22476 Lange, St. Clair Shores
Buckley, Mrs. Daniel.....160 S. Walnut St., Mt. Clemens
Charbeneau, Mrs. Patrick.....33 Hollywood Ct.,
Mt. Clemens
Cherup, Mrs. Nick.....24215 Hill, Centerline

Croman, Mrs. Joseph M.....131 Market, Mt. Clemens
Curatolo, Mrs. Victor.....28 Breitmeyer Pl., Mt. Clemens
Dudzinski, Mrs. E. J.....36818 E. Main, New Baltimore
Engels, Mrs. John A.....36050 Friday, Richmond
Hartmann, Mrs. Waldemar B.....43481 N. Gratiot,
Mt. Clemens
Heine, Mrs. Austin.....38567 Riverside Dr., Mt. Clemens
Herrington, Mrs. Clark.....629 Chippewa, Mt. Clemens
Kane, Mrs. John.....145 Cass, Mt. Clemens

Kane, Mrs. W. J.....171 North Ave., Mt. Clemens
 Kane, Mrs. Peter.....1340 Hampton, Mt. Clemens
 Maguire, Mrs. A. J.....45463 Van Dyke, Utica
 Matthews, Mrs. Chris.....135 Riverside, Mt. Clemens
 Maxim, Mrs. Edward.....34140 Jefferson, St. Clair Shores
 Mulligan, Mrs. P. T.....59 Ahrens Ave., Mt. Clemens
 Moore, Mrs. Geo. F.....20 Kendrick, Mt. Clemens
 Peltier, Mrs. Stanley J.....151 North, Mt. Clemens
 Persson, Mrs. G. A.....198 S. Gratiot, Mt. Clemens
 Reichman, Mrs. J. J.....70 Gallup, Mt. Clemens
 Reitzel, Mrs. R. H.....1 Breitmeyer Pl., Mt. Clemens
 Revere, Mrs. J. O.....192 S. Gratiot, Mt. Clemens
 Rinkenburg, Mrs. Earl.....940 Chippewa, Mt. Clemens
 Rivard, Mrs. C. L.....32926 Jefferson, St. Clair Shores
 Rousseau, Mrs. D. J.....863 Harrington, Mt. Clemens
 Salot, Mrs. R. F.....11 Breitmeyer Pl., Mt. Clemens

Siegfried, Mrs. E. G.....77 Scott Blvd., Mt. Clemens
 Sims, Mrs. William.....26850 Grandmont, Roseville
 Smith, Mrs. M. C.....117 Lodewyck, Mt. Clemens
 Stryker, Mrs. Oscar.....31032 Jefferson Ave.
 St. Clair Shore
 Stubbs, Mrs. Clayton.....126 S. Gratiot, Mt. Clemens
 Stubbs, Mrs. Harold W.....29240 Grandview Ave.
 Mt. Clemens
 Thompson, Mrs. A. A.....35 Miller St., Mt. Clemens
 Ullrich, Mrs. R. W.....421 Robertson, Mt. Clemens
 Wellard, Mrs. Henry C.....35788 Koenig Dr
 New Baltimore
 Whitley, Mrs. A.....21707 Erben Dr., St. Clair Shore
 Wiley, Mrs. D. B.....45223 Cass Ave., Utic
 Wolfson, Mrs. V. H.....272 Riverside Dr., Mt. Clemens
 Wyte, Mrs. William C.....38616 Lakeshore, Mt. Clemens

MARQUETTE-ALGER COUNTIES

Acocks, Mrs. James.....Morgan Heights, Marquette
 Amolsch, Mrs. Arthur L.....321 Pine St., Marquette
 Armstrong, Mrs. Wayne.....921 Pine, Marquette
 Bennett, Mrs. Matthew C.....409 E. Ohio, Marquette
 Bertucci, Mrs. Joseph.....517 N. Pine, Ishpeming
 Bolitho, Mrs. T. B.....425 E. Michigan Ave., Marquette
 Bottom, Mrs. C. N.....624 N. Third, Marquette
 Burke, Mrs. R. A.....Palmer
 Casler, Mrs. Wilbur L.....127 East Ridge, Marquette
 Cooperstock, Mrs. M.....402 E. Ridge, Marquette
 d'Adesky, Mrs. Raymond.....1115 Second, Marquette
 Drury, Mrs. Chas. D.....414 E. Hewitt, Marquette
 Elzinga, Mrs. Eugene.....415 E. Hewitt, Marquette
 Erickson, Mrs. A. W.....621 N. Fourth St., Ishpeming
 Erickson, Mrs. Douglas.....621 N. Fourth St., Ishpeming
 Green, Mrs.....Gwinn
 Hettle, Mrs. Paul J.....337 E. Hewitt, Marquette
 Hornbogen, Mrs. D. P.....320 Cedar St., Marquette
 Howe, Mrs. Lloyd W.....453 E. Michigan, Marquette

Jaedecke, Mrs. R. G.....1427 N. 2nd St., Ishpeming
 Johnson, Mrs. Rex R.....Nichole St., Marquette
 Koenig, Mrs. Harry.....413 E. Ohio, Marquette
 Knutson, Mrs. George O.....120 Main St., Negaunee
 Lambert, Mrs. W. C.....347 Ridge, Marquette
 Lyons, Mrs. James.....Lakewood, Marquette
 Markham, Mrs. Isabel P.....401 N. Fourth, Marquette
 Matthews, Mrs. Norman.....123 E. Park, Marquette
 Moore, Mrs. Bert.....U. S. 41, Negaunee
 Narotzky, Mrs. A. S.....628 E. Ridge St., Ishpeming
 Rosenbaum, Mrs. Louis.....2004 Deer Lake, Ishpeming
 Schultz, Mrs. Marvin.....323 E. College, Marquette
 Stein, Mrs. Paul.....Harvey St., Marquette
 Swinton, Mrs. A. L.....430 E. Arch, Marquette
 Wickstrom, Mrs. G. B.....223 Lynn St., Munising
 Williams, Mrs. R. G.....Deer Lake, Ishpeming
 Wright, Mrs. Charles.....Co. Rd. 545, Marquette
 Youngquist, Mrs. Hazel.....528 E. Arch, Marquette

MASON COUNTY

Bacon, Mrs. Herbert.....125 W. State St., Scottville
 Boldyreff, Mrs. E. E.....Custer
 Boon, Mrs. Floyd.....702 W. Court St., Ludington
 Hoffman, Mrs. H. B.....604 E. Ludington, Ludington
 Martin, Mrs. W. S.....107 W. Ludington, Ludington

Morrow, Mrs. William J.....E. Ludington Av
 Ludington
 Paukstis, Mrs. Chas.....502 N. Lakeshore Dr., Ludington
 Scott, Mrs. R. R.....806 E. Brother St., Ludington
 Spencer, Mrs. C. M.....Scottville
 Switzer, Mrs. G. A.....302 Lake Shore Dr., Ludington

MECOSTA-OSCEOLA-LAKE COUNTIES

Bruggema, Mrs. Jacob.....621 N. Main St., Evart
 Campbell, Mrs. J. B.....320 Division St., Big Rapids
 Chess, Mrs. Leo.....417 W. Upton, Reed City
 Franklin, Mrs. Ben.....Remus
 Haldeman, Mrs. J.....228 S. Warren, Big Rapids
 Ivkovich, Mrs. Paul.....335 West Upton, Reed City
 Kelsey, Mrs. Lee F.....Lakeview
 Kilmer, Mrs. David.....303 State St., Reed City
 Kilmer, Mrs. Paul B.....350 W. Upton, Reed City
 Kowaleski, Mrs. Edward.....Remus

Marston, Mrs. L. L.....Lakeview
 Merlo, Mrs. F. A.....206 S. Michigan, Big Rapids
 Nelson, Mrs. Lorenzo.....Baldwin
 Treynor, Mrs. Thomas P.....107 Ives Ave., Big Rapids
 Tyson, Mrs. J. A.....124 Mecosta, Big Rapids
 Van Auker, Mrs. Edw.....229 S. Warren, Big Rapids
 Walters, Mrs. J. E.....201 Sangorn Ave., Big Rapids
 White, Mrs. J. A.....123 Cedar St., Big Rapids
 Yeo, Mrs. Gordon.....209 Rust St., Big Rapids

MENOMINEE COUNTY

Agneberg, Mrs. N.....221 First St., Menominee
 Brukhardt, Mrs. H. R.....714 14th Ave., Menominee
 Clay, Mrs. Joel.....1031 First St., Menominee
 Dewane, Mrs. F. J.....1409 Seventh St., Menominee
 Flanagan, Mrs. C. B.....915 Eleventh Ave., Menominee
 Glickman, Mrs. L. G.....1603 32nd Ave., Menominee
 Gonty, Mrs. Arthur.....Frontenac Beach, Menominee

Heidenreich, Mrs. J. R.....Daguerre
 Jones, Mrs. W. S., Sr.....101 15th Ave., Menominee
 Jones, Mrs. W. S., Jr.....1834 First St., Menominee
 Kerwell, Mrs. K. C.....Stephens
 Olson, Mrs. Robert C.....1713 22nd Ave., Menominee
 Towey, Mrs. J. W.....Powers
 Whitmarsh, Mrs. Thomas.....Stephens

MIDLAND COUNTY

Ashcom, Mrs. Richard.....15 Dartmoor Pl., Midland
 Ballmer, Mrs. Robert.....1111 W. Sugnet Rd., Midland
 Bernier, Mrs. Joseph.....Box 26, Sanford
 Blackhurst, Mrs. J. Fred.....4506 Hampshire, Midland
 Blackhurst, Mrs. Robert.....306 W. Meadowbrook, Midland
 Bowsher, Mrs. Robert.....901 St. Andrews, Midland
 Bridge, Mrs. Robert.....409 E. St. Andrews, Midland
 Bulmer, Mrs. Dan J.....3110 W. Nelson St., Midland
 Buskirk, Mrs. Maurice.....310 W. Nelson, Midland
 Carsons, Mrs. Ada.....1414 Sugnet Rd., Midland
 Devlin, Mrs. Joseph A.....1111 Eastman Pl., Midland
 Gay, Mrs. Harold.....4589 Ruhle Rd., Rt. 1, Coleman
 Gordon, Mrs. Harold.....1423 Clover St., Midland
 Gronemeyer, Mrs. Wm.....1009 St. Andrews, Midland
 High, Mrs. Charles V.....3115 Isabella Rd., Midland
 Holder, Mrs. B. B.....534 Woodcock, Rt. 2, Midland
 Howe, Mrs. Irvin.....1115 W. Sugnet Rd., Midland
 Howell, Mrs. Richard H.....709 Maple St., Midland

Ittner, Mrs. Martin.....509 W. Sugnet, Midland
 Kaasa, Mrs. Lorin J.....2011 Ashman, Midland
 Lansborough, Mrs. Hester.....127 W. Nelson, Midland
 Linsenmann, Mrs. Karl.....2604 Manor Dr., Midland
 MacCallum, Mrs. Charles.....1684 W. Sugnet Rd., Midland
 Marks, Mrs. V. A.....406 E. Sugnet Rd., Midland
 Maynard, Mrs. William.....Coleman
 Meisel, Mrs. Edward H.....413 Lingle Lane, Midland
 Moench, Mrs. G. Frederick.....147 Center Rd., Sanford
 O'Hara, Mrs. Bernard.....210 E. Sugnet Rd., Midland
 Pike, Mrs. Melvin.....220 W. Nelson, Midland
 Pollock, Mrs. Robert.....123 Jones Court, Midland
 Poznak, Mrs. Leonard.....1411 Crane Ct., Midland
 Randolph, Mrs. S. H.....410 Jerome, Midland
 Sherk, Mrs. Joseph.....161 Revere St., Midland
 Schoff, Mrs. Charles.....2708 Glendale St., Midland
 Stewart, Mrs. Richard.....205 Rodd St., Midland
 Willison, Mrs. C. H.....3812 Greenfield Ct., Midland

MONROE COUNTY

Barker, Mrs. Vincent L.....104 W. Noble Ave., Monroe
 Barrett, Mrs. Clarence D.....2133 Hollywood Dr., Monroe
 Blakey, Mrs. Leonard C.....330 Godfroy Ave., Monroe
 Bond, Mrs. Wm. W.....475 Hollywood Dr., Monroe
 Cigany, Mrs. Z. B.....Carleton
 Douglas, Mrs. Dale W.....151 Hollywood Dr., Monroe
 Ewing, Mrs. Robt. T.....201 N. Macomb St., Monroe
 Flanders, Mrs. L. P.....1434 Hurd Rd., Monroe
 Frary, Mrs. R. A.....505 Strassburg Rd., Rt. 1, Monroe
 Freud, Mrs. J. W.....212 Hollywood Dr., Monroe
 Gelhaus, Mrs. W. J.....623 Scottwood, Monroe
 Kelso, Mrs. S. Newton, Jr.....336 Cole Rd., Monroe
 Laboe, Mrs. E. W.....424 Hollywood Dr., Monroe
 Lammers, Mrs. G. P.....Ida
 Lapp, Mrs. Charles.....Luna Pier
 Loan, Mrs. George B.....50 Virginia Ct., Monroe
 Long, Mrs. Edgar C.....715 Hollywood Dr., Monroe

McDonald, Mrs. T. A.....467 Hollywood Dr., Monroe
 McWillan, Mrs. J. H.....116 Hollywood Dr., Monroe
 Meier, Mrs. Walter.....306 S. Macomb, Monroe
 Middleton, Mrs. Wm. J. S.....427 Hollywood Dr., Monroe
 Newcomer, Mrs. Sheldon R.....1534 Hollywood Dr., Monroe
 Reisig, Mrs. A. H.....430 Hollywood Dr., Monroe
 Sanger, Mrs. E. J.....716 Hollywood Dr., Monroe
 Siffer, Mrs. J. J.....32 S. Macomb St., Monroe
 Sisman, Mrs. Bernard.....524 Hollywood Dr., Monroe
 Streicher, Mrs. R. G.....315 Colonial Dr., Monroe
 Tomlinson, Mrs. Ledyard H.....Newport
 Wagar, Mrs. Spencer.....711 Hollywood Dr., Monroe
 Weeks, Mrs. Vernon.....417 E. Elm, Monroe
 Wilkins, Mrs. Rolland W.....4940 W. Albain Rd., Monroe
 Williams, Mrs. R. J.....306 Godfroy Ave., Monroe

MUSKEGON COUNTY

August, Mrs. Ralph.....64 W. Larch, Muskegon
 Barnes, Mrs. James.....5112 Ossum, Whitehall
 Beers, Mrs. Charles.....67 Crescent, Muskegon Heights
 Benedict, Mrs. Arthur L., Jr.....1633 Clinton, Muskegon
 Bloom, Mrs. Robert E.....1440 Winchester, Muskegon
 Bolthouse, Mrs. Robert.....1641 Jefferson, Muskegon
 Bond, Mrs. William.....1724 Peck St., Muskegon
 Bradshaw, Mrs. Park.....636 Ruddiman, North Muskegon
 Busard, Mrs. R. I.....3910 Highgate, Muskegon
 Christopherson, Mrs. J. W.....1276 Lakeshore Dr., Muskegon
 Clapp, Mrs. H.....1585 Glen, Muskegon
 Clark, Mrs. Harry.....1450 Leahy, Muskegon
 Closz, Mrs. Harold.....1727 Jefferson St., Muskegon
 Dasler, Mrs. Adolph.....4177 Highgate, Muskegon
 DeLeeuw, Mrs. Henry.....2213 Peck St., Muskegon Hts.
 Derezinski, C. F.....11 Muskegon Blvd., Wolf Lake
 Dykhuizen, Mrs. Harold.....962 W. Mona Brook Rd., Muskegon
 Ellis, Mrs. N. J.....1408 Lexington, Muskegon
 Emerick, Mrs. R.....1714 Leahy, Muskegon
 Engstrom, Mrs. Albert.....1411 Gee, Whitehall
 Fleischman, Mrs. Charles.....1573 Jefferson, Muskegon
 Fleishman, Mrs. Norman.....1310 Moulton Ave., Muskegon
 Fles, Mrs. R. J.....1715 Peck St., Muskegon
 Folsom, Mrs. John.....2388 Pine Grove, Muskegon
 Fugate, Mrs. Edward M.....3484 E. Oscola Dr., Muskegon

Galkema, Mrs. E. W.....605 First St., North Muskegon
 Garber, Mrs. Frank.....703 Ruddiman, North Muskegon
 Griffith, Mrs. Robert.....1323 Fourth, Muskegon
 Hack, Mrs. Donald W.....3875 Lake Harbor, Muskegon
 Hanley, Mrs. William.....2535 Pine Grove, Muskegon
 Harryman, Mrs. James.....1694 Jefferson St., Muskegon
 Hartwell, Mrs. Shattuck.....1665 Jefferson, Muskegon
 Harvey, Mrs. J. G. Klemm.....3163 Scenic Dr., Muskegon
 Heneveld, Mrs. Edward.....82 W. Dale Ave., Muskegon
 Heneveld, Mrs. John.....4036 Stanford, Muskegon
 Heneveld, Mrs. Robert.....1458 Montague St., Muskegon
 Hill, Mrs. James.....2371 Hadden, Muskegon
 Holly, Mrs. Leland.....3349 Scenic Dr., Muskegon
 Hornbeck, Mrs. W. J.....2510 Pine Grove, Muskegon
 Jesson, Mrs. Robert M.....2344 Fifth, Muskegon Hts.
 Joistad, Mrs. Arthur.....Interlaken Mid Oak Drive, North Muskegon
 Kane, Mrs. Thomas.....1185 Scenic Dr., Muskegon
 Kerr, Mrs. Howard.....2378 Hadden, Glenside, Muskegon
 Kleaveland, Mrs. Justin.....654 Wendover, Roodmont, Muskegon
 Lapham, Mrs. Landon.....123 Colby, Whitehall
 Lauretti, Mrs. Emil.....1693 Jefferson St., Muskegon
 Laurin, Mrs. V. S.....3319 Scenic Dr., Muskegon
 LeFevre, Mrs. Louis.....730 Lake Dr., North Muskegon
 LeFevre, Mrs. Wm.....3033 Scenic Dr., Muskegon
 Loder, Mrs. L. L.....Circle Dr., North Muskegon
 Lowry, Mrs. Robert A.....1840 Fifth, Muskegon

MacLean, Mrs. Donald B.....659 Lake Dr.,
North Muskegon
Maples, Mrs. Douglas.....814 Moulton, North Muskegon
McNair, Mrs. John.....1395 Glen Ave., Muskegon
Medema, Mrs. Paul.....1661 Clinton St., Muskegon
Meengs, Mrs. Marvin.....972 Randall Rd., Muskegon
Miller, Mrs. Phillip.....1652 Jefferson, Muskegon
Morford, Mrs. Fred N.....Hamilton Apts., Muskegon
Mulder, Mrs. Lambertus.....3918 Henry, Muskegon
Mulligan, Mrs. A. W.....123 W. Larch, Muskegon
Oden, Mrs. C. L. A.....1593 Jefferson, Muskegon
Paterson, Mrs. L. C.....3458 Scenic Dr., Muskegon
Pettinga, Mrs. F. L.....4050 Quainton, Muskegon
Prentice, Mrs. Edwin.....2325 Westwood Dr., Glenside,
Muskegon
Price, Mrs. Leonard.....1182 Terrace St., Muskegon
Pyle, Mrs. Henry.....Lake Dr., North Muskegon
Risk, Mrs. Robert D.....3980 Highgate Ave., Roodmont,
Muskegon
Scholle, Mrs. Norbert.....3848 Highgate, Muskegon
Sears, Mrs. Richard B.....1859 Spencer Dr., Muskegon

Shebesta, Mrs. E. M.....2342 Westwood Rd., Glenside,
Muskegon
Stone, Mrs. M. E.....1541 Peck, Muskegon
Stubbart, Mrs. F. James.....2417 Hadden, Muskegon
Swarthout, Mrs. W. B.....349 Ruddiman, North Muskegon
Swedenburg, Mrs. Robert.....2460 Pinegrove, Muskegon
Swenson, Mrs. Leland L.....3503 Scenic Dr., Muskegon
Teifer, Mrs. Charles.....1506 Daws Rd., Roosevelt Park
Tellman, Mrs. H. C.....590 Ranch Rd., Muskegon
Thornton, Mrs. Eugene S.....Interlaken Circle Dr.,
North Muskegon
Tyler, Mrs. Wm.....1572 Jefferson, Muskegon
Vanderlaan, Mrs. John.....1427 Forest Park Rd., Muskegon
Vandervelde, Mrs. Clarence.....4042 Loomis, Muskegon
VanGelder, Mrs. Wm. C.....626 Cambridge, Muskegon
Wagenaar, Mrs. Edward.....912 Mona Brook Rd.,
Muskegon
White, Mrs. Warren G.....1185 Harbor Pt. Dr., Muskegon
Wiersema, Mrs. Silas.....1337 Peck, Muskegon
Wildgen, Mrs. Bernard.....975 W. Seminole Rd.,
Muskegon
Wilson, Mrs. Pitt.....625 Miller Dr., N. Muskegon

NEWAYGO COUNTY

Black, Mrs. Lulu.....Holton
Geerlings, Mrs. Lambert.....6726 W. Lake Dr., Fremont
Geerlings, Mrs. Willis.....28 East Oak St., Fremont
Klein, Mrs. J. Paul.....40 East Pine St., Fremont
Masters, Mrs. B. L.....415 E. Maple, Fremont

O'Neill, Mrs. John W.....White Cloud
Paxton, Mrs. Robert.....221 S. Stewart Ave., Fremont
VandenBerg, Mrs. Tunis.....413 E. Oak, Fremont
Veenschoten, Mrs. Girard.....Hesperia
Webb, Mrs. Roy.....210 Woodrow Ave., Fremont

NORTH CENTRAL COUNTIES

Barstow, Mrs. Richard D.....220 E. Sheldon, Gaylord
Howarth, Mrs. Thomas.....Gladwin
Jardine, Mrs. Hugh.....109 S. Third, West Branch
Libke, Mrs. R. S.....E. Main St., Gaylord

Oppy, Mrs. Charles L.....108 Main St., Roscommon
Peckham, Mrs. R. C.....N. Center St., Gaylord
Rodda, Mrs. E. H.....Lake Margrethe, Graylin
Stealy, Mrs. Stanley A.....Graylin

NORTHERN MICHIGAN COUNTIES

Allen, Mrs. Robert.....Lincoln Place, Petoskey
Alm, Mrs. Bernhard T.....Petoskey St., Petoskey
Crippen, Mrs. Edward F.....Mancelona
Elliott, Mrs. Dean.....Mitchell St., Petoskey
Frye, Mrs. Sanders.....Summit St., Harbor Springs
Grate, Mrs. L. E.....101 S. Prospect, Charlevoix
Lawrie, Mrs. Guy.....Mitchell St., Petoskey

Lester, Mrs. Vernon.....Lincoln Place, Petoskey
Litzenburger, Mrs. Albert.....Pearl Street, Boyne City
McKnight, Mrs. Robert.....Lincoln Place, Petoskey
Pearson, Mrs. Robert.....Pearl St., Petoskey
Reus, Mrs. Leonard.....729 Lockwood Ave., Petoskey
Saltonstall, Mrs. G. B.....429 Michigan, Charlevoix
Taylor, Mrs. Robert.....Lincoln Place, Petoskey
Webster, Mrs. Jene.....Mitchell St., Petoskey

OAKLAND COUNTY

Abbott, Mrs. Vernon C.....111 Illinois, Pontiac
Albrecht, Mrs. Robert.....549 Grisdale, Pontiac
Arnkoff, Mrs. Harry.....140 Illinois, Pontiac
Aulie, Mrs. Hal G.....5928 Orchard Bend, Birmingham
Baker, Mrs. Robert.....1129 Fairfax, Birmingham
Bannow, Mrs. R. J.....23 Keswick, Bloomfield Hills
Barker, Mrs. Chas.....1371 Club Dr., Pontiac
Barker, Mrs. Howard.....Martell Dr., Bloomfield Hills
Barrett, Mrs. John.....27821 Bloomfield, Birmingham
Bauer, Mrs. Bruce.....29424 Sherry, Royal Oak Twp.
Bauer, Mrs. Ernest W.....48 W. Roberts, Hazel Park
Beattie, Mrs. W. G.....314 W. Maplehurst Ave., Ferndale
Belknap, Mrs. Warren F.....2020 Roseland, Royal Oak
Blackwell, Mrs. Leonard.....51 Niagara, Pontiac
Blakeney, Mrs. James.....17 Utica, Pontiac
Boucher, Mrs. R. E.....5451 Brookdale, Birmingham
Bowers, Mrs. Chas.....199 Barrington, Pontiac
Bradley, Mrs. E. L.....231 Starr, Pontiac
Brown, Mrs. Arnold L.....7899 Cooley Lake Rd., Pontiac
Budd, Mrs. Alexander.....440 Lake Park Dr., Birmingham
Burger, Mrs. John.....1702 W. Houstonia, Royal Oak

Burke, Mrs. Chauncey G.....1123 Glengary Circle,
Birmingham
Cefai, Mrs. A. F.....42 Miami Rd., Pontiac
Chandler, Mrs. Douglas.....17700 Grandville, Detroit
Cheng, Mrs. James.....7350 Cooley Lake Rd., Pontiac
Christensen, Mrs. W. L.....31100 Marlin Ct., Sfld. Tw
Birmingham
Christie, Mrs. Edward.....632 Ardmore, Birmingham
Cobb, Mrs. Leon.....2378 Maplewood, Pontiac
Cobb, Mrs. Thomas.....4415 Motorway Dr., Pontiac
Collins, Mrs. E. F.....463 W. Iroquois, Pontiac
Cudney, Mrs. Ethan B.....159 Marlborough, Pontiac
Darling, Mrs. C. G.....Lone Pine Ct., Bloomfield Hills
DeLawter, Mrs. H. H.....979 Westwood, Birmingham
Derr, Mrs. William.....7 Fairwood, Pleasant Ridge
Deutsch, Mrs. Wm. L.....26695 York, Huntington Woods
Dobski, Mrs. Edwin.....3350 Eastpointe Lane, Royal Oak
Pontiac
Drew, Mrs. Dale.....4031 Dukeshire, Royal Oak
Dunn, Mrs. Lewis E.....18760 San Diego Dr., Birmingham

Durocher, Mrs. Norman E.....2880 Old Orchard Dr.,
Pontiac
Ekelund, Mrs. C. T.....149 Ottawa Dr., Pontiac
Elder, Mrs. Edward, Jr.....230 Starr, Pontiac
Esslinger, Mrs. John.....191 Frank St., Birmingham
Evseef, Mrs. George.....2685 Amberly, Birmingham
Foust, Mrs. E. W.....28145 Lathrup, Birmingham
Fox, Mrs. Ralph M.....230 Westwood, Birmingham
Furlong, Mrs. Harold.....207 Navajo Rd., Pontiac
Gaensbauer, Mrs. Ferd.....217 Illinois, Pontiac
Galpin, Mrs. Richard.....937 Henley Dr., Birmingham
Gariepy, Mrs. Bernard.....312 Park, Royal Park
Gates, Mrs. E. M.....3200 Allen Rd., Ortonville
Gehring, Mrs. N. F.....400 Yarmouth, Birmingham
Gerls, Mrs. Frank.....536 W. Huron, Pontiac
Gibson, Mrs. Wellington.....216 Commerce St., Milford
Gill, Mrs. Matthew.....3115 Franklin Rd., Bloomfield Hills
Green, Mrs. Ralph.....24100 Stratford, Oak Park
Green, Mrs. Wm. M.....517 W. Iroquois, Pontiac
Gregoire, Mrs. Earl.....290 Liberty, Pontiac
Grekin, Mrs. Thomas.....18699 Muirland, Detroit
Gustafson, Mrs. Everette.....3780 Lakewood Dr., Pontiac
Hackett, Mrs. Daniel J.....782 Owego Dr., Pontiac
Haddock, Mrs. Douglass.....5700 Pontiac Trail, RFD 5,
Pontiac
Hasner, Mrs. Robert.....1712 Sycamore, Royal Oak
Hendron, Mrs. Owen.....16 Barbour Lane, Bloomfield Hills
Hershey, Mrs. Lynn N.....31275 Franklin Rd., Birmingham
Hill, Mrs. Edward.....277 Pierce, Birmingham
Hoekman, Mrs. A.....1470 Hamilton, Pontiac
Hoyt, Mrs. D. F.....7530 Maceday Lake Rd., Clarkston
Hubert, Mrs. John.....4955 Stoneyleigh, Bloomfield Hills
Ignatius, Mrs. Aram.....1120 E. 9 Mile Rd., Ferndale
Jones, Mrs. L. Faust.....7350 Cooley Lake Rd., Pontiac
Keeffe, Mrs. E.....468 Williamsbury, Bloomfield Hills
Kemp, Mrs. F. J.....85 Barrington Rd., Pontiac
Kemp, Mrs. Lloyd.....1055 Yarmouth, Birmingham
Kendrick, Mrs. H. F.....260 Cherokee, Pontiac
Ketchum, Mrs. Jesse.....429 Manor Rd., Royal Oak
Koehler, Mrs. Wm.....1906 W. Houstonia, Royal Oak
LaCore, Mrs. Ivan.....Pontiac State Hosp. Grounds,
Pontiac
Lahti, Mrs. Paul.....315 Fairfax, Birmingham
LaMarche, Mrs. Norman.....4139 Wakefield, Berkley
Landry, Mrs. Roy A.....3388 Caseyburn, Drayton Plains
Leach, Mrs. Charles.....987 Oakland, Birmingham
Levine, Mrs. Bernard.....24081 Geneva, Oak Park
Lichtwardt, Mrs. Harry.....4805 N. Harsdale Rd.,
Bloomfield Hills
Lilly, Mrs. Richard.....865 Norwich, Birmingham
Lowery, Mrs. A. J.....8125 Mario, Pontiac
Lyons, Mrs. R. T.....200 Oneida, Pontiac
Marra, Mrs. John J.....1430 Nokomis Dr., Lake Orion
Mason, Mrs. Robert.....564 Overhill, Birmingham
McCain, Mrs. French.....788 Puritan, Birmingham
McConkie, Mrs. J. P.....2425 W. Lincoln, Birmingham
McInery, Mrs. Thomas S.....2026 Laurome, Royal Oak
McNeil, Mrs. H. H.....Hickory Grove Rd., Pontiac
McPhee, Mrs. Edward C.....1051 Woodlea, Birmingham
Mehas, Mrs. Constantine.....300 W. Hickory Grove,
Bloomfield Hills
Meinke, Mrs. Herman.....817 E. Eight Mile Rd.,
Hazel Park
Meisner, Mrs. H. E.....12910 Oak Pk., Oak Park
Mercer, Mrs. Frank.....87 Ottawa Dr., Pontiac
Miller, Mrs. H. L.....1832 Greenleaf, Royal Oak
Miller, Mrs. Sidney.....709 Tottenham, Birmingham

Mimura, Mrs. James.....145 Church, Highland Park
Mueller, Mrs. Elmer J.....1702 W. Houstonia, Royal Oak
Nalepa, Mrs. Eugene.....2332 Rutherford Rd., Pontiac
Naz, Mrs. John N.....2826 Orange Grove, Rt. 7, Pontiac
Neafie, Mrs. C. A.....493 Orchard Lake Rd., Pontiac
Nickerson, Mrs. I. D.....6245 Golfview Dr., Birmingham
Norup, Mrs. John.....1772 Edgewood, Berkley
Nosanchuk, Mrs. Joseph.....197 Cherokee Rd., Pontiac
Olsen, Mrs. R. E.....3325 Franklin Rd., Bloomfield Hills
Ott, Mrs. Harold.....1090 Lake Park, Birmingham
Palmer, Mrs. Hayden.....269 Ottawa, Pontiac
Patrick, Mrs. Charles.....4350 Pontiff, Waterford
Payton, Mrs. Chas. F.....1002 Pilgrim, Birmingham
Peeke, Mrs. Edward S.....Lochlin Rd., Pontiac
Petroff, Mrs. George N.....219 Cherokee, Pontiac
Pierce, Mrs. W. H.....774 Colonial Ct. Terrace,
Birmingham
Porritt, Mrs. Ross.....131 Chippewa, Pontiac
Prather, Mrs. F. W.....701 E. Liberty, Milford
Prosser, Mrs. M. G.....2854 Orangegrove, Pontiac
Quinn, Mrs. James R.....223 Marlborough, Pontiac
Rabe, Mrs. Robert E.....8510 Abington Rd., Detroit
Raynale, Mrs. Geo. P.....423 Tooting Lane, Birmingham
Reid, Mrs. Fred T.....18450 Riverside Dr., Birmingham
Riggs, Mrs. Harry L.....3499 Franklin Rd., Pontiac
Rowley, Mrs. L. C.....670 Williams Lake, Pontiac
Rupp, Mrs. E. C.....202 Crane Ave., Royal Oak
Rush, Mrs. Alva D.....464 Townsend, Birmingham
Russell, Mrs. V. P.....9 Elm Park, Pleasant Ridge
Ruva, Mrs. Joseph.....1280 Club Dr., Bloomfield Hills
Sansone, Mrs. Thomas J.....2184 Somerset Rd., Pontiac
Schuneman, Mrs. Howard.....1312 Vinsetta, Royal Oak
Segula, Mrs. Robert.....6811 Williams Lake Rd.,
Pontiac
Sempere, Mrs. Chas.....2225 Avondale, Pontiac
Sewell, Mrs. Geo.....6181 Indianwood Trail, Birmingham
Shadley, Mrs. Maxwell.....94 Ottawa Dr., Pontiac
Sheffield, Mrs. L. S.....4651 Motorway Dr., Pontiac
Sheridan, Mrs. Michael.....10415 Lincoln,
Huntington Woods
Smith, Mrs. D. S.....135 Wenonah Dr., Pontiac
Smith, Mrs. George E.....2019 W. Houstonia, Royal Oak
Somers, Mrs. Donald C.....4205 Valley Forge, Birmingham
Sommerville, Mrs. Wm.....145 Cambridge, Pleasant Ridge
Spencer, Mrs. L. H.....26039 Huntington,
Huntington Woods
Spoehr, Mrs. Eugene.....17 Elm Park, Pleasant Ridge
Spohn, Mrs. Earl.....414 Hendrie Blvd., Royal Oak
Stahl, Mrs. Harold.....850 Lapeer Rd., Oxford
Sterling, Mrs. Robert R.....52 Oxford Blvd., Pleasant Ridge
Stuecheli, Mrs. Milton.....1084 Willow Lane, Birmingham
Sutton, Mrs. Palmer E.....1617 Vinsetta, Royal Oak
Tuck, Mrs. Raymond.....17 Delaware, Pontiac
Vanden Berg, Mrs. K.....4045 Lakewood-Watkins Lake,
Pontiac
Van Zoeren, Mrs. Jay.....1645 Derby Rd., Birmingham
Virga, Mrs. Geo. M.....1602 Cedar Hill, Royal Oak
Wake, Mrs. Douglas.....1406 Woodsboro, Royal Oak
Walser, Mrs. Howard.....1300 Northlawn, Birmingham
Wagner, Mrs. Wm.....539 Mt. Vernon Blvd., Royal Oak
Webber, Mrs. Lynn.....7315 Sanitarium, Pontiac
White, Mrs. R. Hamilton.....552 Monhegan, Birmingham
Whitehouse, Mrs. J.....1136 Selfridge Blvd., Clawson
Wilkinson, Mrs. Arthur.....974 Fisher Bldg., Detroit
Williams, Mrs. John.....6570 Commerce Rd., Pontiac
Zackheim, Mrs. H. S.....13102 Talbot, Huntington Woods
Zujko, Mrs. Alphonse.....132 Illinois, Pontiac

OTTAWA COUNTY

Beernink, Mrs. E.....430 Duncan St., Grand Haven
DeVries, Mrs. Peter.....526 Lafayette St., Grand Haven
DeYoung, Mrs. F.....107 Barber Ct., Spring Lake
Frieswyck, Mrs. Melvin.....148 So. Division St., Zeeland
Groat, Mrs. Frank.....633 Franklin, Grand Haven

Heard, Mrs. Wm.....243 W. Main St., Hudsonville
Hager, Mrs. R.....243 W. Main St., Hudsonville
Kemme, Mrs. G. J.....Rt. 3, Zeeland
Kools, Mrs. Willis.....194 W. 11th St., Holland
Kuipers, Mrs. S. W.....93 E. 29th St., Holland

McArthur, Mrs. Peter..1719 Wisconsin St., Grand Haven
 Ten Have, Mrs. R.....1016 Sheldon, Grand Haven
 Ten Pas, Mrs. Henry.....Box 47, Hamilton
 Vander Berg, Mrs. E.....69 W. 14th, Holland

VandeWaa, Mrs. A.....200 E. Main St., Zeeland
 Wells, Mrs. Kenneth.....117 E. Savidge, Spring Lake
 Westrate, Mrs. W.....568 Central Ave., Holland
 Westrate, Jr., Mrs. Wm.....55 W. 14th St., Holland

SAGINAW COUNTY

Ackerman, Mrs. G. L.....316 Brockway Pl., Saginaw
 Albers, Mrs. M. J.....218 Ardussi, Saginaw
 App, Mrs. Robert G.....1911 Seminole, Saginaw
 Bass, Mrs. Vernon.....916 Adams St., Saginaw
 Bishop, Mrs. H. M.....28 Benton Rd., Saginaw
 Brender, Mrs. F. P.....105 Hubinger, Frankenmuth
 Bruggers, Mrs. Lawrence..2543 N. Woodbridge, Saginaw
 Bucklin, Mrs. R. V.....2112 Adams Blvd., Saginaw
 Bullington, Mrs. B. M.....1924 Handley, Saginaw
 Busch, Mrs. F. J.....40 E. Hannum Blvd., Saginaw
 Butler, Mrs. M. G.....1440 Hemmeter Rd., Saginaw
 Cady, Mrs. Donald.....2230 Hemmeter, Saginaw
 Cady, Mrs. F. J.....8590 Gratiot, Saginaw
 Cady, Mrs. F. J., Jr.....61 Benton Rd., Saginaw
 Cambridge, Mrs. V. W.....1219 Fitzhugh, Saginaw
 Cameron, Mrs. Allan G.....1314 S. Jefferson, Saginaw
 Cameron, Mrs. Hugh A.....248 Snow, Saginaw
 Campbell, Mrs. L. A.....335 Brockway Place, Saginaw
 Caumartin, Mrs. Hugh T..1537 S. Washington, Saginaw
 Chisena, Mrs. P. R.....6227 Dixie Hwy., Bridgeport
 Claytor, Mrs. A. A.....603 N. Third, Saginaw
 Comer, Mrs. Walter.....U. S. Armv, Saginaw
 Cortopassi, Mrs. A. J.....326 S. Washington, Saginaw
 Cortopassi, Mrs. V. E.....221 Ardussi, Saginaw
 Cory, Mrs. C. W.....No. 4 Ardmore Pl., Saginaw
 Curts, Mrs. J. H.....No. 1 East Hannum Blvd., Saginaw
 Davenport, Mrs. Clyde.....703 W. Genesee, Saginaw
 Durman, Mrs. D. C.....1530 Ottawa Blvd., Saginaw
 Ely, Mrs. Cecil W.....3735 Eaton, Saginaw
 Farley, Mrs. A. W., Jr.....265 Anderson Rd., Saginaw
 Feeheley, Mrs. Robert.....1621 Coolidge, Saginaw
 Fleschner, Mrs. Thos. E.....744 W. Birch Run Rd.,
 Birch Run
 Gage, Mrs. D. P.....134 Borland St., Saginaw
 Galsterer, Mrs. E. C.....417 Brockway Place., Saginaw
 Gamon, Mrs. Adam E.....905 N. Michigan, Saginaw
 Gardner, Mrs. J. H.....2503 Adams Blvd., Saginaw
 Gerard, Mrs. Roy.....450 Peace St., Saginaw
 Gilmore, Mrs. Robert.....246 W. Saginaw St., Merrill
 Goldner, Mrs. Richard.....2414 Wesley Drive, Saginaw
 Gomon, Mrs. L. D.....16 Edgewood Rd., Saginaw
 Goodsell, Mrs. John.....132 Graham St., Saginaw
 Hand, Mrs. Eugene.....487 S. Washington St., Saginaw
 Harvie, Mrs. L. C.....417 Ardussi, Saginaw
 Heavenrich, Mrs. R. M.....225 Garden Lane, Saginaw
 Helmkamp, Mrs. H. O.....2311 Mershon, Saginaw
 Hester, Mrs. E. G.....2525 N. Court, Saginaw
 Hill, Mrs. V. L.....1270 Hemmeter Rd., Saginaw
 Howell, Mrs. Donald.....2112 Gratiot, Saginaw
 Hutchinson, Mrs. John W.....521 Madison, Saginaw
 Hyslop, Mrs. William T.....2008 Harry, Saginaw
 Jaenichen, Mrs. Robert.....419 S. Weadock, Saginaw
 James, Mrs. J. W.....253 Snow, Saginaw
 Jarvi, Mrs. Rudolph.....3051 Congress, Saginaw
 Johnstone, Mrs. K. T.....1050 Fischer Dr., Saginaw
 Kemp, Mrs. J. N.....1322 S. Michigan, Saginaw
 Kempton, Mrs. R. M.....415 Hayden St., Saginaw
 Kerr, Mrs. W. B.....1903 North Bond St., Saginaw
 Keyes, Mrs. James T.....8152 Main, Birch Run
 Kickham, Mrs. Edward.....2525 Mershon St., Saginaw
 Kolesar, Mrs. R. C.....2032 Harris, Saginaw
 Kowals, Mrs. F. V.....1220 Glendale, Saginaw
 Kramer, Mrs. Charles G.....1721 Brenner, Saginaw
 Kretschmer, Mrs. T. V.....700 Remington, Saginaw
 Lassignal, Mrs. Jules C.....1587 Delta Dr., Saginaw
 Ling, Mrs. Kenneth C.....Hemlock
 Lohr, Mrs. O. W.....614 Madison, Saginaw
 Lohr, Mrs. Thomas O.....1135 N. Michigan, Saginaw

Luger, Mrs. Fred I.....1970 N. River Rd., Saginaw
 Lurie, Mrs. Robert I.....58 Davis Rd., Saginaw
 MacMeekin, Mrs. J. W.....Center Woods, Saginaw
 Mahaney, Mrs. Thomas P.....212 S. Granger, Saginaw
 Manning, Mrs. Edward J.....Center Woods, Saginaw
 Manning, Mrs. John W., III..203 Ardussi St., Saginaw
 Markey, Mrs. F. L.....2011 Brockway, Saginaw
 Markey, Mrs. J. P.....2425 Adams Blvd., Saginaw
 Martzowka, Mrs. W. P.....2330 Delaware Blvd., Saginaw
 Matthews, Mrs. H. C.....1621 Lathrup Rd., Saginaw
 Mayne, Mrs. Harold E.....1585 Glendale, Saginaw
 McEwen, Mrs. Wm.....820 Orchard Ct., Saginaw
 McKinney, Mrs. A. R.....1403 Howard St., Saginaw
 Meadows, Mrs. Joseph.....2435 N. Bond, Saginaw
 Meyer, Mrs. H. J.....6243 Dixie Hwy., Bridgeport
 Miller, Mrs. Glen F.....1803½ N. Michigan, Saginaw
 Morgrette, Mrs. L. J.....1286 Avalon, Saginaw
 Mudd, Mrs. R. D.....1001 Hoyt St., Saginaw
 Murphy, Mrs. A. P.....201 Superior, Saginaw
 Murray, Mrs. C. R.....1584 Glendale, Saginaw
 Murray, Mrs. M. J.....1925 Coolidge Rd., Saginaw
 Naglins, Mrs. Jacobs.....732 Emerson, Saginaw
 Nelson, Mrs. O. A.....1654 Lathrup, Saginaw
 Northway, Mrs. Robert O.....12 Edgewood Rd., Saginaw
 Novy, Mrs. F. O.....420 S. Jefferson, Saginaw
 Olson, Mrs. C. P.....2505 Court, Saginaw
 Ostrander, Mrs. F. W.....Freeland
 Phillips, Mrs. H. A.....2420 Adams Blvd., Saginaw
 Pietz, Mrs. Frederick.....2139 Gratiot, Saginaw
 Potvin, Mrs. C. D.....206 S. Carolina, Saginaw
 Powers, Mrs. Robt.....142 Wylie Ct., Saginaw
 Prather, Mrs. Perry.....519 Liberty, Saginaw
 Richards, Mrs. N. W.....2111 Brockway, Saginaw
 Richter, Mrs. H. J.....2305 Adams Blvd., Saginaw
 Ruskin, Mrs. David B.....246 Lockwood, Saginaw
 Ryan, Mrs. R. S.....623 S. Park St., Saginaw
 Sample, Mrs. J. T.....602 Rust St., Saginaw
 Sargent, Mrs. D. V.....4680 Ashland Dr., Saginaw
 Schaiberger, Mrs. Elmer..10164 Dixie Hwy., Birch Run
 Schneider, Mrs. A. N.....1902 N. Bond, Saginaw
 Schultz, Mrs. Frank R.....Chesaning
 Sharp, Mrs. M. C.....2202 Barnard St., Saginaw
 Shek, Mrs. John L.....4115 Vera, Saginaw
 Sheldon, Mrs. S. A.....77 Elmview Court, Saginaw
 Siler, Mrs. D. E.....47 Ardmore Pl., Saginaw
 Skowronski, Mrs. C. A.....1401 E. Genesee, Saginaw
 Skowronski, Mrs. Marion J.....1916 Ring, Saginaw
 Slack, Mrs. W. K.....615 S. Jefferson, Saginaw
 Slade, Mrs. Homer G.....1667 S. Washington, Saginaw
 Smith, Mrs. Chandler.....1902 Wilson, Saginaw
 Stahly, Mrs. E. H.....1900 Coolidge Ave., Saginaw
 Stander, Mrs. A. C.....1411 Court St., Saginaw
 Stewart, Mrs. G. W.....4343 State Rd., Saginaw
 Sulfridge, Mrs. Hugh, Jr..4505 N. River Rd., Saginaw
 Thompson, Mrs. A. B.....2144 Ottawa, Saginaw
 Tiedke, Mrs. G. E.....2339 Delaware Blvd., Saginaw
 Toshach, Mrs. Clarence.....3655 Schust Rd., Saginaw
 Volk, Mrs. V. K.....3340 Hospital Rd., Saginaw
 Watson, Mrs. R. S.....730 N. Mason, Saginaw
 Webb, Mrs. Walter.....1502 Wadsworth, Saginaw
 Weeks, Mrs. E. G.....1413 Howard St., Saginaw
 Weidner, Mrs. Garland.....1801 Brenner, Saginaw
 Weiss, Mrs. Arno.....4945 Dundale Ct., Saginaw
 Weiss, Mrs. Richard.....1930 N. Morson, Saginaw
 Westlund, Mrs. Norman.....131 S. Charles, Saginaw
 Wright, Mrs. E. M.....128 Lynn, Saginaw
 Yntema, Mrs. Stuart.....3 E. Hannum Blvd., Saginaw

ST. CLAIR COUNTY

Bailey, Mrs. Robert.....4579 Lake Shore, Port Huron
 Banting, Mrs. Kenneth.....3540 Gratiot Ave., Port Huron
 Barss, Mrs. Joseph A.....2815 Tenth Ave., Port Huron
 Battley, Mrs. J. C. S.....2038 Military St., Port Huron
 Beck, Mrs. F. K.....2902 Military St., Port Huron
 Beer, Mrs. J. F.....711 N. Riverside Dr., St. Clair
 Borden, Mrs. Charles.....4520 Lake Shore Rd., Port Huron
 Bottomley, Mrs. T. H.....4440 Gratiot Ave., Port Huron
 Cantwell, Mrs. John D.....3119 Conger St., Port Huron
 Cleland, Mrs. W. D.....1320 Court St., Port Huron
 Clifford, Mrs. Robert P.....910 N. Riverside, St. Clair
 Clyne, Mrs. B. C.....Yale
 Coury, Mrs. J. J.....4234 Gratiot Ave., Port Huron
 Davison, Mrs. Wm.....2920 Military St., Port Huron
 Dinnen, Mrs. Wm. J.....3202 Riverside Dr., Port Huron
 Douvas, Mrs. Nicholas.....1712 Court St., Port Huron
 Franke, Mrs. Armin T.....3173 Conger St., Port Huron
 Gholz, Mrs. Anthony C.....1407 Court St., Port Huron
 Gilmore, Mrs. John R.....4830 Lake Shore, Port Huron
 Hazeldine, Mrs. H. J.....404 Edison Blvd., Port Huron
 Holcomb, Mrs. R. J.....141 S. Main St., Marine City
 Hoyt, Mrs. C. N.....2548 Military St., Port Huron
 Kirban, Mrs. Harry N.....6040 Lakeshore, Port Huron
 Kirker, Mrs. F. O.....1601 N. River Rd., St. Clair

Koch, Mrs. Donald A.....4802 Lake Shore Rd., Port Huron
 Lauridsen, Mrs. James.....2833 Gratiot Ave., Port Huron
 Licker, Mrs. R. R.....215 Gratiot Blvd., Rt. 2, Marysville
 Ludwig, Mrs. Claude.....3550 Stone St., Port Huron
 Ludwig, Mrs. Fred.....2864 Military St., Port Huron
 Lugg, Mrs. Robert M.....2701 Military St., Port Huron
 Meredith, Mrs. E. W.....4380 Gratiot Ave., Port Huron
 Morris, Mrs. Alvin N.....816 Sanborn St., Port Huron
 Mohney, Mrs. Glenn E.....4458 Gratiot Ave., Port Huron
 Novak, Mrs. Walter.....3150 Waldheim Dr., Port Huron
 Rowe, Mrs. John.....3360 W. Water St., Port Huron
 Schaefer, Mrs. W. A.....2551 Military St., Port Huron
 Selby, Mrs. C. S.....1916 Military, Port Huron
 Serniak, Mrs. John.....5014 Lakeshore Rd., Port Huron
 Sites, Mrs. Edgar C.....2704 Military St., Port Huron
 Tisdell, Mrs. James H.....2557 Military St., Port Huron
 Tomsu, Mrs. Glenn.....3180 Gratiot Ave., Port Huron
 Townley, Mrs. Chas. O.....2815 Military St., Port Huron
 Treadgold, Mrs. Douglas.....3205 Armour St., Port Huron
 Ulmer, Mrs. Arthur H.....4318 Gratiot Ave., Port Huron
 Van Rhee, Mrs. George.....3137 Conger St., Port Huron
 Walker, Mrs. Sidney.....5090 Lake Shore Rd., Port Huron
 Wass, Mrs. Henry C.....923 N. Riverside, St. Clair
 Yost, Mrs. K. W.....Marysville

ST. JOSEPH COUNTY

Berg, Mrs. L. A.....106 E. Chicago Rd., Sturgis
 Braham, Mrs. W. G.....105 N. Lakeview, Sturgis
 Brothers, Mrs. Paul.....205 Ilene, Sturgis
 Brunson, Mrs. A. E.....Mortimer St., Sturgis
 Evans, Mrs. R. H.....105 S. Lakeview, Sturgis
 Fiegel, Mrs. A. S.....500 Michigan Ave., Sturgis
 Fortner, Mrs. R. J.....RFD 1, Constantine
 Jacobowitz, Mrs. J. W.....222 West St., Three Rivers
 Leopard, Mrs. O. L.....606 E. Chicago Rd., Sturgis

O'Dell, Mrs. Chas.....E. Hoffman St., Three Rivers
 O'Dell, Mrs. John.....721 Elm Ave., Three Rivers
 Penzotti, Mrs. Stanley.....117 Spring St., Three Rivers
 Porter, Mrs. C. G.....196 E. Michigan, Three Rivers
 Shaw, Mrs. G. D.....R. Rt. 3, Three Rivers
 Sheldon, Mrs. John.....610 Cherry St., Sturgis
 Smith, Mrs. R. D.....528 Jackson Rd., Colon
 Storer, Mrs. W. R.....132½ S. Nottawa, Sturgis
 Weisheit, Mrs. Heinz.....200 Michigan, Sturgis
 Zimont, Mrs. R. D.....435 White Pigeon Rd., Constantine

SANILAC COUNTY

Blanchard, Mrs. Ernest.....Deckerville
 Cripps, Mrs. James.....Marlette
 Gift, Mrs. Weldon.....Marlette
 Hart, Mrs. Robert K.....21 S. Howard Ave., Croswell
 Jayson, Mrs. Michael.....Marlette
 McCrea, Mrs. John.....Marlette
 McGunegle, Mrs. K. T.....Sandusky

Muir, Mrs. Neil.....269 Howard Ave., Croswell
 Smith, Mrs. Duane.....Brown City
 Tweedie, Mrs. S. M.....Sandusky
 Tweedie, Mrs. G. E.....Sandusky
 Webster, Mrs. J. C.....Marlette
 Winfield, Mrs. Raymond.....Marlette

SHIAWASSEE COUNTY

Austin, Mrs. Eugene.....635 N. Ball St., Owosso
 Bach, Mrs. Norman F.....1201 N. Washington St., Owosso
 Brown, Mrs. Richard C.....658 First St., Owosso
 Brown, Mrs. R. J.....915 West King St., Owosso
 Chipman, Mrs. Elwood.....502 N. Williams St., Owosso
 Ford, Mrs. William.....1107 W. Oliver St., Owosso
 Graves, Mrs. James.....221 E. Oliver St., Owosso
 McGregor, Mrs. John.....202 Jennett St., Owosso

Merz, Mrs. Walter L.....1409 N. Water, R. Rt. 3, Owosso
 Moore, Mrs. Phillip.....1423 Olmstead, Owosso
 Pochert, Mrs. R. C.....1254 N. Shiawassee St., Owosso
 Richards, Mrs. Chester.....Durand
 Sahlmark, Mrs. Joseph.....203 N. Cedar St., Owosso
 Slagh, Mrs. Earl N.....Elsie
 Weinkauf, Mrs. Wm.....415 W. Mack St., Corunna
 Weston, Mrs. Claude.....1226 N. Washington St., Owosso

TUSCOLA COUNTY

Ballard, Mrs. J. H.....Cass City
 Donahue, Mrs. H. T.....Cass City
 Flett, Mrs. Richard.....Millington
 Howlett, Mrs. R. R.....Caro

Nigg, Mrs. H. L.....308 S. State St., Caro
 Savage, Mrs. R. L.....Caro
 Swanson, Mrs. E. C.....Vassar

WASHTENAW COUNTY

Itzen, Mrs. J. F.....	1023 Phoenix, South Haven
Kleber, Mrs. John.....	551 N. Shore Dr., South Haven
Loomis, Mrs. F. J.....	Ackley Lake, Paw Paw
Parks, Mrs. Arthur.....	Lawton
Stagg, Mrs. Adelbert.....	9 Maple St., Hartford
Steele, Mrs. Arthur H.....	725 N. Kalamazoo, Paw Paw
Ten Houten, Mrs. Charles.....	215 N. Kalamazoo, Paw Paw
Young, Mrs. William R.....	Lawton

WASHTENAW COUNTY

Hagerman, Mrs. G. W.....2124 Tuomy Rd., Ann Arbor
Haight, Mrs. Cameron.....2112 Vinewood, Ann Arbor
Hammond, Mrs. Walter W., Jr.....1312 Maple St.,
Plymouth
Harrell, Mrs. R.....2112 Copley, Ann Arbor
Harris, Mrs. Bradley.....206 S. Washington, Ypsilanti
Harris, Mrs. Scott.....1144 Roosevelt Blvd., Ypsilanti
Henderson, Mrs. John.....2113 Devonshire Rd., Ann Arbor
Hicks, Mrs. Richard.....Ypsilanti State Hosp., Ypsilanti
Hildebrant, Mrs. H. M.....1223 Morningside Dr.,
Ann Arbor
Himler, Mrs. Leonard E.....1225 Fair Oaks Pkwy.,
Ann Arbor
Hodges, Mrs. F. J.....505 Highland Lane, Ann Arbor
Holt, Mrs. John.....250 Orchards Hills Dr., Ann Arbor
Hopp, Mrs. Ralph.....338 E. Kingsley, Ann Arbor
House, Mrs. F. B.....1240 Crosby Crescent, Ann Arbor
Howard, Mrs. S. C.....2009 Devonshire, Ann Arbor
Howard, Mrs. W. L.....47787 W. Eight Mile Rd.,
Northville
Jewell, Mrs. A. Hartwell, Jr.....505 N. Division Ave.,
Ann Arbor
Johnston, Mrs. Franklin.....1761 Westridge Rd., Ann Arbor
Kabza, Mrs. Theodore.....2310 Fernwood, Ann Arbor
Kambly, Mrs. A. H.....1602 Leaird, Ann Arbor
Kemper, Mrs. John.....320 Juniper Lane, Barton Hills,
Ann Arbor
Kern, Mrs. Wheeler.....24801 Fairmount Dr., Dearborn
Kershul, Mrs. V. W.....1128 W. Washington, Ann Arbor
Kivi, Mrs. Louis.....1619 Kirtland Dr., Ann Arbor
LeFever, Mrs. S. L.....2131 Melrose, Ann Arbor
Lapides, Mrs. Jack.....3133 N. Wagner Rd., Ann Arbor
LaVielles, Mrs. C. J.....1500 Kirtland Dr., Ann Arbor
Lowry, Mrs. Claude.....1707 Shadford Rd., Ann Arbor
Magielski, Mrs. John E.....404 Westwood, Ann Arbor
Mandeville, Mrs. Richard C.....2021 DeVonlon, Ann Arbor
Marshall, Mrs. Mark.....918 S. Forest Ave., Ann Arbor
Martin, Mrs. D. W.....212 N. Mansfield, Ypsilanti
Maxwell, Mrs. J. H.....2139 Melrose Ave., Ann Arbor
McWilliams, Mrs. J. R.....2402 Brockman, Ann Arbor
Milford, Mrs. A. F.....1203 Whittier Rd., Ypsilanti
Moore, Mrs. Kenneth.....Ypsilanti State Hosp., Ypsilanti
Morley, Mrs. George W.....2505 Geddes, Ann Arbor
Morris, Mrs. Joe D.....1801 Weldon Blvd., Ann Arbor
Muehlig, Mrs. G. F.....1520 White St., Ann Arbor
Newton, Mrs. C. W.....2120 Wallingford, Ann Arbor
Nobel, Mrs. Rudolf E.....Ypsilanti State Hosp., Ypsilanti
Obenauf, Mrs. Walter.....Ypsilanti State Hosp., Ypsilanti
O'Connor, Mrs. Sylvester.....1660 Arlington, Ann Arbor
Parnall, Mrs. Christopher.....510 Onondaga, Ann Arbor
Payne, Mrs. Beverly.....245 Orchard Hills Dr., Ann Arbor
Place, Mrs. Edwin.....2616 Hawthorne Rd., Ann Arbor
Pollard, Mrs. H. M.....2012 Vinewood, Ann Arbor
Rae, Mrs. James W.....2401 Geddes, Ann Arbor
Ratliff, Mrs. R. K.....231 Corrie Rd., Barton Hills,
Ann Arbor
Rehner, Mrs. Robert.....1506 Golden Ave., Ann Arbor
Reichert, Mrs. R. E., Jr.....3516 Edgewood, Ann Arbor
Rekshan, Mrs. Walter.....47558 North Shore Dr., Belleville
Riecker, Mrs. Herman.....2109 Wallingford Rd., Ann Arbor
Riggs, Mrs. Harold.....2119 Devonshire Rd., Ann Arbor

Robinson, Mrs. Wm. D.....1616 E. Stadium, Ann Arbor
Ross, Mrs. Howard.....180 Underdown Rd., Barton Hills,
Ann Arbor
Saunders, Mrs. Allen.....1008 Pauline, Ann Arbor
Sayre, Mrs. George.....1208 Whittier Blvd., Ypsilanti
Schneider, Mrs. Richard C.....1101 Pauline, Ann Arbor
Schumacher, Mrs. W. E.....1475 Stein Rd., Ann Arbor
Seovill, Mrs. Henry.....1313 W. Cross St., Ypsilanti
Seevers, Mrs. M. H.....620 Oxford Rd., Ann Arbor
Sheldon, Mrs. John.....2121 Tuomy Rd., Ann Arbor
Shubeck, Mrs. Frank.....807 Bruce St., Ann Arbor
Sink, Mrs. Emory.....1546 Packard St., Ann Arbor
Sloan, Mrs. Herbert E., Jr.....1718 Shadford Rd.,
Ann Arbor
Smillie, Mrs. John.....2615 Overridge Dr., Ann Arbor
Smith, Mrs. Edwin M.....1720 Chandler, Ann Arbor
Spears, Mrs. Clarence.....1307 Pearl, Ypsilanti
Struthers, Mrs. J. N. P.....Ypsilanti State Hosp., Ypsilanti

Sturgis, Mrs. C. C.....609 Stratford Dr., Ann Arbor
Taylor, Mrs. William.....1244 Ferdon St., Ann Arbor
Thieme, Mrs. E. T.....3 Geddes Heights, Ann Arbor
Towsley, Mrs. Harry A.....1000 Berkshire Rd., Ann Arbor
Tupper, Mrs. Charles J.....2657 Whitewood, Ann Arbor
Von Ahn, Mrs. Harold.....408 Thompson, Ann Arbor
Waggoner, Mrs. R. W.....3333 Geddes Rd., Ann Arbor
Weisman, Mrs. Raoul.....1408 Wells St., Ann Arbor
Westover, Mrs. Charles.....1415 West Maple, Plymouth
Wicht, Mrs. P. J.....1386 W. Michigan Ave., Ypsilanti
Williams, Mrs. H. R.....1508 Granger Ave., Ann Arbor
Williamson, Mrs. F. B.....922 Pleasant Ave., Ypsilanti
Willis, Mrs. P. W.....519 Linden, Ann Arbor
Wilson, Mrs. James.....1801 Hermitage Rd., Ann Arbor
Wolfman, Mrs. Earl, Jr.....827 Bruce St., Ann Arbor
Woods, Mrs. J. J.....1900 Washtenaw, Ypsilanti
Wylie, Mrs. W. C.....3219 B St., Dexter
Zerbi, Mrs. Victor M.....315 N. Adams, Ypsilanti

WAYNE COUNTY

Adamian, Mrs. Gerald.....755 Golf Crest Dr., Dearborn
Adams, Mrs. James R.....715 Morley Court, Dearborn
Akroyd, Mrs. C. A.....19635 Shrewsbury, Detroit 21
Albrecht, Mrs. A. J.....17167 Fairfield, Detroit 21
Albrecht, Mrs. Herman F.....877 Chicago Blvd., Detroit
Alexander, Mrs. Eugene J.....24140 Wilson, Dearborn
Allard, Mrs. Andrew J.....4350 Haverhill, Detroit 24
Amos, Mrs. T. Grover.....2708 Woodstock Dr., Detroit 3
Anderson, Mrs. James.....7715 Middlepointe, Dearborn
Andries, Mrs. Geo. H.....17365 Muirland Ave., Detroit 21
Arehart, Mrs. Burke.....534 Roslyn Rd., Grosse Pointe 36
Arminski, Mrs. T. C.....16874 Muirland, Detroit 21
Ashe, Mrs. Stilson R.....12 Byfield Lane, Dearborn
Ashley, Mrs. L. Byron.....18050 Fairway Dr., Detroit 21
August, Mrs. Harry E.....26081 Hendrie Blvd.,
Huntington Woods
Auld, Mrs. Douglas.....7838 Bingham, Dearborn
Axelson, Mrs. A. U.....17390 Fairway Dr., Detroit 21
Babcock, Mrs. Lloyd K.....13901 Ashbury Park, Detroit 27
Babcock, Mrs. W. W.....18254 Oak Drive, Detroit 21
Baer, Mrs. Raymond.....702 Lakepointe, Grosse Pointe 30
Bagley, Mrs. Harry E.....7541 Oakman Blvd., Dearborn
Bailey, Mrs. C. C.....12824 Broadstreet Ave., Detroit 38
Bailey, Mrs. Louis J.....620 Vinewood, Birmingham
Barber, Mrs. Ray.....990 S. Harvey, Plymouth
Barnett, Mrs. Louis L.....8 Millington Rd., Pleasant Ridge
Barone, Mrs. Charles J.....51 Eason Ave., Highland Park 3
Barone, Mrs. C. Gerald.....1851 Crosswick, Birmingham
Barrett, Mrs. Wyman D.....91 Touraine Rd.,
Grosse Pointe Farms 36
Barron, Mrs. James.....2535 Amberly Rd., Birmingham
Bates, Mrs. W. M.....2587 W. Grand Blvd., Detroit 8
Bauer, Mrs. Lester E.....4 Woodside Park, Pleasant Ridge
Baumgarten, Mrs. E. C.....1062 Lochmoor,
Grosse Pointe 36
Beach, Mrs. Watson.....281 Kenwood Court,
Grosse Pointe Farms 30
Beamer, Mrs. Geo.....15834 Longmeadow Ave., Dearborn
Bedwell, Mrs. Wm.....183 Ridgemont Rd., Grosse Pointe
Beduwkes, Mrs. L. E.....13014 Mackenzie, Detroit 28
Behan, Mrs. Robert C.....1353 Balfour, Grosse Pointe Park
Bell, Mrs. J. Kenner.....49 Rhode Island Ave.,
Highland Park 3
Berlien, Mrs. Ivan C.....2906 E. Jefferson Ave., Detroit 7
Best, Mrs. Edward.....1229 Three Mile Dr.,
Grosse Pointe 30
Betha, Mrs. Hardee.....279 Kenwood Court,
Grosse Pointe Farms 36
Bielawski, Mrs. John G.....8124 E. Morrow Circle,
Detroit 4
Birch, Mrs. John R.....161 Vendome, Grosse Pointe 36
Bittrick, Mrs. Norman.....7474 LaSalle Blvd., Detroit 6
Birkhill, Mrs. Frederick Ross.....19510 Roslyn Rd.,
Detroit 21

Blain, Mrs. Alexander.....1028 Berkshire Rd.,
Grosse Pointe 30
Block, Mrs. Duane.....13930 Abington, Detroit 27
Blodgett, Mrs. Wm. H.....535 Overhill Rd., Birmingham
Bogue, Mrs. R. E.....19161 Lancashire, Detroit 23
Boileau, Mrs. Thornton I.....460 Hamilton Rd.,
Birmingham
Bolstad, Mrs. Donald.....225 S. Silvery Lane, Dearborn
Boutrous, Mrs. T. A.....18508 Sorrento, Detroit 35
Bowers, Mrs. L. J.....47 Cambridge, Pleasant Ridge
Boyd, Mrs. Eugene J.....24163 Penn, Dearborn
Brabaglia, Mrs. L.....1308 Hampton Rd., Grosse Pointe 36
Bracken, Mrs. Andrew H.....7540 Oakman Blvd., Dearborn
Braley, Mrs. Wm. N.....19300 Riverside Dr., Birmingham
Breneman, Mrs. Gerald.....16926 Thirteen Mile Rd.,
Birmingham
Briggs, Mrs. Wm.....4121 Harvard Rd., Detroit 24
Brines, Mrs. Osborne A.....1415 Parker Ave., Apt. 266,
Detroit 14
Bringard, Mrs. Elmer.....18110 Fairfield Ave., Detroit 21
Bristol, Mrs. Wm. R.....6142 Bishop Rd., Detroit 24
Bronson, Mrs. W. W.....845 Lone Pine Road,
Bloomfield Hills
Brooks, Mrs. Clark D.....17196 Fairway Dr., Detroit 21
Brosius, Mrs. Wm. L.....16150 Sorrento, Detroit 35
Brough, Mrs. Glen A.....25519 Meridian Rd., Grosse Ile
Brown, Mrs. A. G.....13991 Asbury Park, Detroit 27
Brown, Mrs. Audrey O.....46 Oakdale Blvd.,
Pleasant Ridge
Brown, Mrs. Carlton.....16552 Westmoreland, Detroit 19
Brown, Mrs. Gordon T.....8355 E. Outer Dr., Detroit 13
Brush, Mrs. Brock E.....22313 Cherryhill, Dearborn
Bryan, Mrs. John.....30540 Rock Creek Dr., Birmingham
Buerki, Mrs. Robin.....201 Lake Shore, Grosse Pointe 36
Buesser, Mrs. Frederick G.....8100 E. Jefferson Ave.,
Detroit 14
Burke, Mrs. Ralph M.....580 University Pl.,
Grosse Pointe 30
Burnham, Mrs. David C.....16167 Glastonbury Rd.,
Detroit 19
Burns, Mrs. Robert.....4610 Somerset, Detroit 24
Burr, Mrs. George.....2016 W. Boston Blvd., Detroit 6
Burroughs, Mrs. R. G.....31624 Auburn Dr., Birmingham
Caldwell, Mrs. John R.....4850 Bryn Mawr Rd.,
Birmingham
Calkins, Mrs. H. Neill.....15302 Gilchrist, Detroit 27
Callaghan, Mrs. Thos. T.....201 E. Kirby, Detroit 2
Cameron, Mrs. D. A.....15454 Ashton Rd., Detroit 23
Campbell, Mrs. Mac D.....3 Sylvan Rd., Pleasant Ridge
Campbell, Mrs. R. E.....943 Fisher Rd., Grosse Pointe 30
Candler, Mrs. Clarence L.....1690 Faircourt,
Grosse Pointe Woods 36
Capano, Mrs. O. A.....26415 Meadowbrook Way,
Lathrup Village, Birmingham

Caputo, Mrs. Joseph M.....22575 Nona, Dearborn
 Caputo, Mrs. O. A.....22575 Nona, Dearborn
 Carbone, Mrs. Louis.....487 Lakeland, Grosse Pointe 30
 Carnes, Mrs. Harry E.....652 Lincoln Rd., Grosse Pointe 30
 Carpenter, Mrs. Claire H.....18701 Snowden Ave.,
 Detroit 35
 Carrick, Mrs. Lee.....506 Lakeshore Lane,
 Grosse Pointe Woods 36
 Carter, Mrs. John M.....18900 Fairway Dr., Detroit 21
 Carter, Mrs. Leland F.....750 Middlesex Rd., Grosse Pointe
 Caughey, Mrs. A. F., Jr.....8911 Marygrove Dr., Detroit 21
 Chall, Mrs. Henry G.....2941 W. McNichols, Detroit 21
 Chance, Mrs. Jos. H.....12731 Dartmouth, Oak Park 37
 Chapin, Mrs. Sidney.....425 Golfcrest, Dearborn
 Charleston, Mrs. Roderick A.....17256 Pierson, Detroit 19
 Chester, Mrs. William P.....2916 Seminole, Detroit 14
 Chipman, Mrs. Willard A.....14613 Rutland Rd.,
 Detroit 27
 Christensen, Mrs. C. A.....7876 Hartwell Ave., Dearborn
 Christopher, Mrs. James G.....9515 W. Outer Dr.,
 Detroit 23
 Clark, Mrs. Arthur M.....318 Beechmont, Dearborn
 Clarke, Mrs. Robert B.....385 University Place,
 Grosse Pointe 30
 Clifford, Mrs. T. P.....4355 Glendale Ave., Detroit 4
 Cochrane, Mrs. E. G.....13974 Archdale Rd., Detroit 27
 Cole, Mrs. James E.....15322 Stahelin, Detroit 27
 Colvin, Mrs. Leslie T.....18470 Scarsdale, Detroit 28
 Connelly, Mrs. Richard C.....1360 Three Mile Dr.,
 Grosse Pointe 30
 Connolly, Mrs. Paul J.....16778 Westmoreland Ave.,
 Cook, Mrs. James C.....5 Fairmount Ct., Dearborn
 Cooksey, Mrs. Warren B.....19510 Stratford Dr.,
 Detroit 21
 Cooper, Mrs. Benjamin F.....1124 Berkshire,
 Grosse Pointe 30
 Cooper, Mrs. E. L.....914 Shirley, Birmingham
 Cooper, Mrs. Ralph.....15610 Linnhurst, Detroit 5
 Cooper, Mrs. Richard F.....23130 Wilson, Dearborn 7
 Corbett, Mrs. John J.....57 Merriweather Ave.,
 Grosse Pointe Farms 36
 Corbett, Mrs. J. V.....22924 Edgewood, St. Clair Shores
 Coseglio, Mrs. R. P.....1359 Berkshire, Grosse Pointe 30
 Costello, Mrs. Russell T.....2850 Pine Lake Dr., Rt. 3,
 Pontiac
 Courville, Mrs. C. J.....19719 Whitcomb, Detroit 35
 Croll, Mrs. Maurice.....18003 Muirland, Detroit
 Crook, Mrs. Charles L.....60 Colorado, Highland Park 3
 Croushore, Mrs. James E.....1185 Westwood, Birmingham
 Cushing, Mrs. R. G.....643 Lochmoor,
 Grosse Pointe Woods 36
 Cusick, Mrs. Paul L.....17575 Oak Dr., Detroit 21
 Dale, Mrs. Edward C.....380 Fisher, Grosse Pointe 30
 Danforth, Mrs. R. D.....1960 Oxford, Grosse Pointe 36
 Darling, Mrs. Chas E.....14401 Glastonbury Rd.,
 Detroit 23
 Darling, Mrs. Milton A.....8100 LaSalle Blvd., Detroit 6
 Darnley, Mrs. J. D.....24 Fairwood, Pleasant Ridge
 Davies, Mrs. Windsor.....1013 Audubon, Grosse Pointe 36
 Day, Mrs. Francis.....3851 Harvard, Detroit 24
 DeFever, Mrs. Cyril R.....1113 Kensington Rd.,
 Grosse Pointe 30
 DeGiustino, Mrs. Ceasar.....1435 Berkshire,
 Grosse Pointe Park 30
 DeJongh, Mrs. Edwin.....3880 W. Lincoln, Birmingham
 DeNike, Mrs. A. James.....2906 E. Jefferson, Detroit 7
 Derleth, Mrs. Paul E.....563 W. Oakridge, Ferndale 20
 DeSpelder, Mrs. R. E.....1452 Yorkshire, Grosse Pointe 30
 Devine, Mrs. Herbert W.....1315 Harvard,
 Grosse Pointe 30
 Diekman, Mrs. Fred C.....19701 Burt Rd., Detroit 19
 Dill, Mrs. J. Lewis.....18615 Birchcrest Ave., Detroit 21
 Dimond, Mrs. George C.....6853 Orchard, Dearborn
 Ditzler, Mrs. John W.....490 St. Clair, Grosse Pointe 30
 Dixon, Mrs. Robert K.....201 East Kirby Ave., Detroit 2

Doering, Mrs. Wendell R.....27489 Lathrup, Birmingham
 Dolega, Mrs. Stanley.....366 Moross,
 Grosse Pointe Farms 36
 Dolgoff, Mrs. Sidney.....9855 Melbourne, Allen Park
 Donald, Mrs. Douglas.....8120 E. Jefferson, Detroit 14
 Dorsey, Mrs. John M.....65 Moss, Highland Park 3
 Doub, Mrs. Howard P.....18234 Wildemere Ave.,
 Detroit 21
 Downer, Mrs. Ira G.....435 Lodge Dr., Detroit 14
 Draves, Mrs. Edward F.....14541 Grandmont, Detroit 27
 Dubin, Mrs. J. J.....1420 Strathcona, Detroit 3
 Dubois, Mrs. P. W.....630 Merrick Ave., Detroit 2
 Dudek, Mrs. John J.....17166 Parkside Ave., Detroit 21
 Dumke, Mrs. Paul R.....544 Middlesex Blvd.,
 Grosse Pointe 30
 Dundas, Mrs. Edward.....1235 Beechmont, Dearborn
 Dunlap, Mrs. Henry.....505 Lake Point, Grosse Pointe 30
 Dunn, Mrs. Cornelius E.....3496 Burns Ave., Detroit 14
 Dupler, Mrs. Gerald.....1126 Mayburn, Dearborn
 Durham, Mrs. Everett W.....844 N. Highland, Dearborn
 Dutcher, Mrs. Dwight J.....21742 Newcastle,
 Grosse Pointe 36
 Duwe, Mrs. Frank A.....17580 Avilla, Lathrup Village,
 Birmingham
 Dziuba, Mrs. John F.....17230 Bentler, Detroit 19
 Ebner, Mrs. Charles M.....22925 Colony Rd.,
 St. Clair Shores
 Eldredge, Mrs. Edward F.....310 Moross, Grosse Pointe 30
 Elvidge, Mrs. R. J.....18031 Hamilton, Detroit
 Ensign, Mrs. Dwight C.....Franklin
 Eschbach, Mrs. J. W.....410 River Lane, Dearborn
 Evans, Mrs. Gomer.....2328 Stanhope, Grosse Pointe 36
 Evans, Mrs. J. M.....12862 E. Outer Dr., Detroit 24
 Ewing, Mrs. C. H.....526 University Place,
 Grosse Pointe 30
 Eyler, Mrs. W. R.....18347 Bedford Rd., Birmingham
 Fallis, Mrs. L. S.....2474 Chicago Blvd., Detroit 6
 Felcyn, Mrs. W. G.....2091 W. Grand Blvd., Detroit 8
 Fellers, Mrs. R. L.....4984 Ridgewood Ave., Detroit 4
 Fenton, Mrs. Edwin.....14831 Warwick Rd., Detroit 23
 Fenton, Mrs. Russell.....18469 Hillcrest Blvd., Birmingham
 Ferris, Mrs. G. N.....16745 Oakfield, Detroit 35
 Figiel, Mrs. Leo.....1940 Hawthorne, Dearborn 2
 Figiel, Mrs. Steven J.....6648 Oakman Blvd., Dearborn
 Fisher, Mrs. C. L.....791 University Place,
 Grosse Pointe 30
 Fisher, Mrs. James M.....754 Rivard Blvd.,
 Grosse Pointe 30
 Fitzgerald, Mrs. J. M.....16838 Huntington Rd.,
 Detroit 19
 Flaherty, Mrs. H. J.....27360 Rainbow Circle, Lathrup
 Village, Birmingham
 Flaherty, Mrs. Norman W.....24315 Fairmount Dr.,
 Dearborn
 Flaherty, Mrs. Samuel A.....14065 Warnick Rd.,
 Detroit 23
 Flora, Mrs. W. R.....589 Pemberton,
 Grosse Pointe Park 30
 Fogt, Mrs. Robert G.....720 Hidden Lane,
 Grosse Pointe 36
 Font, Mrs. Anthony J.....29539 W. 6 Mile Rd., Livonia
 Ford, Mrs. G. A.....18934 Fairfield Ave., Detroit 21
 Fordell, Mrs. Frank.....441 S. Oakwood Blvd., Detroit 17
 Foster, Mrs. Wm. L.....15316 Piedmont, Detroit 23
 Frame, Mrs. Boy.....1051 Covington, Detroit 3
 France, Mrs. C. Jackson.....3401 Burns, Detroit 14
 Franjac, Mrs. Marion.....37355 W. 8 Mile Rd., Livonia
 Frederickson, Mrs. George C.....1450 Oxford Rd.,
 Grosse Pointe 36
 Freitas, Mrs. Eugene L.....19914 Fairway,
 Grosse Pointe Woods
 Frey, Mrs. J. L.....17144 Westmoreland, Detroit 19
 Fritz, Mrs. George.....80 Lochmoor Blvd., Grosse Pointe 36
 Fryfogle, Mrs. James.....24500 Inkster, Farmington
 Gajewski, Mrs. John E.....1320 Grayton,
 Grosse Pointe Park 30

Ganschow, Mrs. J. H....10025 Nadine, Huntington Woods
 Gardner, Mrs. Lawrence W.....18782 Glenwood,
 Birmingham
 Gardner, Mrs. Max L.....1158 Yorkshire, Grosse Pointe
 Gaston, Mrs. Herbert B.....7501 W. Morrow Circle,
 Dearborn
 Gehring, Mrs. Harold.....17607 Magnolia Parkway,
 Detroit 35
 Geib, Mrs. L. O....1411 Berkshire, Grosse Pointe Park 30
 Gerondale, Mrs. E. J.....15000 Dexter Blvd., Detroit 21
 Gigante, Mrs. Nicola.....1728 Seminole, Detroit 14
 Gillespie, Mrs. Stephen M.....1638 DaCosta, Dearborn
 Gittins, Mrs. Perry.....20210 Renfrew Rd., Detroit 21
 Glowacki, Mrs. Ben F.....840 Jonathan Lane,
 Bloomfield Hills
 Gordon, Mrs. J. Whitlock....12700 Mendota, Detroit 4
 Gottlieb, Mrs. Jacques S.....7111 Fairhill Rd.,
 Bloomfield Hills
 Gourley, Mrs. E. V.....27426 Morningside Plaza,
 Birmingham
 Goux, Mrs. Raymond S.....17566 Muirland Ave.,
 Detroit 21
 Grace, Mrs. Joseph M.....27453 Rainbow Circle,
 Lathrup Village, Birmingham
 Grady, Mrs. J. A.....14246 Riverview, Detroit 23
 Grain, Mrs. Gerald O.....17556 Oak Dr., Detroit 21
 Granger, Mrs. George R.....88 Renaud Rd.,
 Grosse Pointe 36
 Gravelle, Mrs. L. J.....1156 Yorkshire Rd.,
 Grosse Pointe Park 30
 Graves, Mrs. James H.....1304 Buckingham,
 Grosse Pointe 30
 Gray, Mrs. J. P.....8900 E. Jefferson, Apt. 913,
 Detroit 14
 Green, Mrs. Edward W.....30024 Champine Dr.,
 St. Clair Shores
 Green, Mrs. L. M.....1230 N. Oxford Rd.,
 Grosse Pointe 36
 Green, Mrs. Nelson.....107 Elm Park, Pleasant Ridge
 Greenlee, Mrs. W. T.....15239 Cedargrove, Detroit
 Griffin, Mrs. Robert J.....965 W. Crescent Lane,
 Grosse Pointe 36
 Grossman, Mrs. Sol C.....20015 Shrewbury, Detroit 21
 Guerrero, Mrs. J.....4285 Glendale, Detroit 4
 Gurdjian, Mrs. E. S.....19385 Renfrew Rd., Detroit 21
 Guyton, Mrs. Jack S.....402 University Pl.,
 Grosse Pointe 30
 Hall, Mrs. E. Walter.....14189 Rosemont, Detroit
 Hall, Mrs. Winthrop.....6 Cherry Lane, Dearborn
 Hallen, Mrs. L. J.....14032 Ohio, Detroit 38
 Hamil, Mrs. Brenton M.....12 Adams Lane, Dearborn
 Hamilton, Mrs. Quentin P.....16287 Menodta, Detroit 21
 Hammer, Mrs. R. W.....17340 Runyon, Detroit 24
 Hansen, Mrs. Frederick E.....120 Glynn Court, Apt. 700,
 Detroit 2
 Harley, Mrs. L. M.....17325 Fairfield, Detroit 21
 Harm, Mrs. W. B.....16260 Cherrylawn Ave., Detroit 21
 Harris, Mrs. Harold H.....7350 Oakman, Dearborn
 Hartman, Mrs. Blanche B.....7661 LaSalle Blvd.,
 Detroit 6
 Hasley, Mrs. Clyde K...2490 Longfellow Ave., Detroit 6
 Hassig, Mrs. Walter W.....161 Stephens, Grosse Pointe
 Hastings, Mrs. Orville J.....10427 E. Outer Dr.,
 Detroit 24
 Hauser, Mrs. I. Jerome..1980 Strathcona Dr., Detroit 21
 Hauser, Mrs. John E.....688 Hamilton, Birmingham
 Havers, Mrs. Howard.....271 Kenwood Court,
 Grosse Pointe 30
 Hazen, Mrs. R. S.....15371 Stout, Detroit 23
 Heideman, Mrs. Louis.....18010 Roselawn, Detroit 21
 Heldt, Mrs. Richard F.....18491 Ardmore, Detroit 35
 Henderson, Mrs. Leslie T.....832 N. Renaud,
 Grosse Pointe 30
 Herbst, Mrs. Harold B.....20482 Ardmore, Detroit 36
 Herwick, Mrs. John T.....18731 Glenwood, Birmingham
 Hess, Mrs. Murray W.....23860 Seneca, Oak Park

Heyner, Mrs. S. A.....3424 Oakman Blvd., Detroit 4
 Hickey, Mrs. Joseph....24346 Fairmount Drive, Dearborn
 Hicks, Mrs. F. G.....1000 Westwood, Birmingham
 Hillenbrand, Mrs. Alfred E.....675 Fisher Rd.,
 Grosse Pointe 30
 Hoaglund, Mrs. T. V.....630 W. Hildale, Detroit 3
 Hodges, Mrs. Frank J.....7407 Oakman Blvd., Dearborn
 Hodges, Mrs. Jason.....1200 S. Oxford Rd.,
 Grosse Pointe Woods 36
 Hodgkinson, Mrs. Paul C.....17546 Meadowwood,
 Birmingham
 Hoffman, Mrs. Edwin S.....14877 Warwick, Detroit 23
 Holt, Mrs. Charles, Jr....1575 Faircourt, Grosse Pointe
 Hopkins, Mrs. William.....16626 Fairfield, Detroit 21
 Horn, Mrs. Robert C.....505 Pemberton, Grosse Pointe
 Howard, Mrs. Austin Z....15492 Ashton Rd., Detroit 23
 Howell, Mrs. James T.....27907 E. California Dr.,
 Birmingham
 Howes, Mrs. H. A... ..9322 Artesian, Detroit 28
 Howlett, Mrs. Howard T.....20026 Shrewsbury,
 Detroit 21
 Hranchook, Mrs. Michael.....5042 Haverhill, Detroit 24
 H'Romadka, Mrs. Louis.....Martel Dr., Bloomfield Hills
 Huber, Mrs. Philip.....1724 Bassett, Royal Oak
 Hudson, Mrs. W. A.....2290 Edison, Detroit 6
 Hulick, Mrs. Archie.....15525 Amherst, Birmingham
 Hull, Mrs. LeRoy W.....20115 Canterbury, Detroit 21
 Hume, Mrs. H. Ross.....1906 Country Club Dr.,
 Grosse Pointe 36
 Huminski, Mrs. T. S.....1232 Devonshire,
 Grosse Pointe Park 30
 Hummel, Mrs. A. R.....1020 Three Mile Dr.,
 Grosse Pointe 30
 Hunt, Mrs. Theodore H.....10095 E. Outer Dr.,
 Detroit 24
 Husband, Mrs. Chas. W.....19450 Argyle Crescent,
 Detroit 3
 Husband, Mrs. Raymond....Overhill Rd., Birmingham
 Hutchins, Mrs. M. Colton.....28010 Goldengate,
 Lathrup Village, Birmingham
 Hyde, Mrs. F. W.....14255 Faust, Detroit 23
 Iacobell, Mrs. Peter H.....8080 E. Lantz, Detroit 34
 Igna, Mrs. E. J.....16924 St. Paul, Grosse Pointe
 Insley, Mrs. Stanley W.....12880 Archdale Ave.,
 Detroit 27
 Irvin, Mrs. Earle.....1343 Buckingham Rd.,
 Grosse Pointe 30
 Irwin, Mrs. William A.....2130 Iroquois, Detroit 14
 Jacobson, Mrs. Lyle F.....14123 Riverview, Detroit 23
 Jaekel, Mrs. C. N.....443 Lexington Ave.,
 Grosse Pointe Farms 36
 Jacobus, Mrs. Wayne.....21535 Kingsville
 Harper Woods 36
 Jaffar, Mrs. Donald J.....630 Merrick, Detroit 2
 Jabsman, Mrs. William E.....700 Seward, Apt. 210,
 Detroit 2
 Jarvis, Mrs. Harold F.....14066 Linnhurst, Detroit 5
 Jeffries, Mrs. Benjamin.....1010 Harvard Place,
 Grosse Pointe 30
 Jend, Mrs. Wm., Jr.....7027 Riverside Dr., Dearborn
 Jensen, Mrs. V. W.....8230 Littlefield, Detroit 28
 Jennings, Mrs. E. R.....370 Moross, Grosse Pointe 36
 Jodar, Mrs. L. W.....21741 Edmunton, St. Clair Shores
 John, Mrs. Hubert R.....31 Oakland Park Blvd.,
 Pleasant Ridge
 Johnson, Mrs. Ralph A..2115 Iroquois Ave., Detroit 14
 Johnson, Mrs. Thomas D.....16800 Stout, Detroit 19
 Johnson, Mrs. Vernon P.....502 Pemberton,
 Grosse Pointe 30
 Johnson, Mrs. Vincent.....345 Lodge Dr., Detroit 14
 Johnston, Mrs. William E....Lee Plaza, 2240 W. Grand
 Blvd., Detroit 8
 Joinville, Mrs. E. V.....3879 Riverside Dr.,
 Windsor, Ontario, Canada
 Jones, Mrs. Roy D.....7747 West Seven Mile Rd.,
 Detroit 21

Joyce, Mrs. Stanley J.....2040 W. McNichols, Detroit 3
Kaplita, Mrs. Walter A.....60 Fontana Lane,
Grosse Pointe
Kasper, Mrs. Joseph A.....1428 Buckingham Rd.,
Grosse Pointe 30
Kauppinen, Mrs. J. A.....19246 Nadol, Detroit 19
Keane, Mrs. William E.....1007 Harvard Rd.,
Grosse Pointe 30
Kehoe, Mrs. Henry J.....91 Renaud Rd.,
Grosse Point Farms 36
Keim, Mrs. Harther L.....369 University Place,
Grosse Pointe 30
Kelley, Mrs. Frank J.....440 Lothrop Rd.,
Grosse Pointe Farms 36
Kennary, Mrs. James.....2250 Iroquois, Detroit 14
Killins, Mrs. Chas.....7712 E. Jefferson Ave., Detroit 14
King, Mrs. Edward D.....2325 W. Grand Blvd., Detroit 8
King, Mrs. Melbourne J.....16021 Warwick, Detroit 23
Knaggs, Mrs. Charles W.....1209 Yorkshire,
Grosse Pointe 30
Knighton, Mrs. Robert S.....27486 Lathrup St.,
Birmingham
Knights, Mrs. E. M., Jr.....373 Rivard Blvd.,
Grosse Pointe
Koebel, Mrs. R. H.....640 Bedford, Grosse Pointe Park 30
Kokowicz, Mrs. R. J.....1151 Buckingham,
Grosse Pointe 30
Korum, Mrs. Lyle.....210 Lothrop, Grosse Pointe
Kossayda, Mrs. Adam W.....2231 Wilson, Dearborn
Krabbenhof, Mrs. K. L.....27 Oakdale, Pleasant Ridge
Krebs, Mrs. William T.....269 Kenwood Court,
Grosse Pointe Farms 36
Kretschmar, Mrs. J. C.....3060 Seminole, Detroit 14
Krynicky, Mrs. F. X.....17127 Muirland, Detroit 21
Kuhn, Mrs. Albert E.....186 West Hildale, Detroit
Kujawski, Mrs. Walter.....20897 Littlestone,
Harper Woods 36
Kulaski, Mrs. Chester H.....7500 E. Robinwood Ave.,
Detroit 34
LaHood, Mrs. M. J.....17300 Cornell, Detroit
Laige, Mrs. Raymond.....1257 Audubon, Grosse Pointe
LaMarche, Mrs. Norman O.....4139 Wakefield Rd.,
St. Johns Woods, Berkley
Lammy, Mrs. J. V.....3797 Wakefield, Berkley
Lampman, Mrs. H. H.....42 Puritan Ave.,
Highland Park 3
Lang, Mrs. Ernest F.....280 Cloverly Rd.,
Grosse Pointe 36
Lange, Mrs. Anthony H.....4502 Grayton, Detroit 24
Laning, Mrs. George M.....2025 W. Six Mile Rd.,
Highland Park 3
Lasichak, Mrs. Andrew.....8502 Sussex, Detroit
Lechner, Mrs. Monroe.....14284 Rosemary, Detroit
Leader, Mrs. L. R.....Cranbrook Rd., Bloomfield Hills
Leibinger, Mrs. Henry R.....511 Barrington Rd.,
Grosse Pointe 30
Lemon, Mrs. Bruce K.....8259 Meyers Rd., Detroit 28
Lepley, Mrs. Fred O.....1125 Three Mile Dr.,
Grosse Pointe 30
Leszynski, Mrs. J. S.....8120 E. Jefferson Ave., Apt. 2N,
Detroit 14
Levagood, Mrs. F.....14056 Artesian, Detroit 23
Lichter, Mrs. Max L.....19320 Berkley, Detroit 21
Liddicoat, Mrs. A. G.....18300 Bretton Dr., Detroit 23
Lightbody, Mrs. J. J.....195 Piper Blvd., Detroit 15
Lignell, Mrs. Rudolph W.....18109 San Juan, Detroit 21
Lilly, Mrs. Chas. J.....16649 Princeton, Detroit 21
Livingood, Mrs. Clarence S.....2950 Iroquois, Detroit 14
Lofstrom, Mrs. Jas. E.....265 Williams,
Grosse Pointe Farms 36
Longo, Mrs. Salvatore.....918 Barrington Rd.,
Grosse Pointe 30
Loranger, Mrs. Clifford B.....888 Lakeshore Rd.,
Grosse Pointe 30
Lovas, Mrs. William S.....10 Hampton Ct., Dearborn
Loucks, Mrs. R. E.....29915 13 Mile Rd., Farmington
Lowe, Mrs. Adolf W.....17117 Parkside, Detroit 14
Lowrie, Mrs. Wm.....Hilltop Lane, Birmingham
Lukas, Mrs. John L.....24365 Rockford, Dearborn
Lutz, Mrs. Earl F.....6178 Lantern Lane, Foxcroft,
Birmingham
Lynn, Mrs. Harvey D.....18285 Birchcrest Dr., Detroit 21
Lytle, Mrs. Robert P.....7065 Pinewood, Bloomfield Twp.,
Birmingham
MacFarlane, Mrs. Howard W.....3476 Seminole, Detroit 14
MacGregor, Mrs. W. W.....6320 W. Surrey, Foxcroft,
Birmingham
Mackersie, Mrs. Wm.....18205 Roselawn, Detroit
MacQueen, Mrs. Malcolm D.....2165 Burns Ave.,
Detroit 14
Maczewski, Mrs. John.....1357 Sunningdale,
Grosse Pointe Woods 30
Mainwaring, Mrs. R. L.....1910 Russell, Dearborn
Malone, Mrs. John M.....20446 Freeland, Detroit 35
Maloney, Mrs. John A.....22635 W. 10½ Mile Rd.,
Rt. 3, Box 11, Birmingham
Mancuso, Mrs. Vincent S.....962 E. Grand Blvd., Detroit 7
Mapletoft, Mrs. Kenneth.....420 Mohawk, Dearborn
Marecki, Mrs. Vincent.....9869 Chatham, Allen Park
Marks, Mrs. Bert W.....8250 Lincoln, Huntington Woods
Marsh, Mrs. A. R.....15696 Woodland Ave., Dearborn
Martin, Mrs. Peter A.....17185 Muirland Ave., Detroit 21
Martmer, Mrs. Edgar E.....693 Washington Rd.,
Grosse Pointe 30
May, Mrs. Frederick T.....28580 Eldorado, Lathrup
Village, Birmingham
McAlonan, Mrs. Wm. T.....630 Merrick Ave., Detroit 2
McCadie, Mrs. J. H.....14241 Artesian, Detroit 23
McClellan, Mrs. Gustave L.....2046 W. Boston Blvd.,
Detroit 6
McClellan, Mrs. Robert J.....20651 Orangelawn,
Detroit 38
McColl, Mrs. Clark.....19701 Chesterfield, Detroit 21
McCormick, Mrs. Colin C.....24352 Rockford Dr.,
Dearborn
McCormick, Mrs. Frank T.....859 Longfellow, Detroit 2
McDonald, Mrs. Angus L.....81 Meadow Lane,
Grosse Pointe
McDonald, Mrs. Allan.....15015 Ward Ave., Detroit 27
McDonald, Mrs. Wm. G.....9347 Becker, Allen Park
McEvitt, Mrs. Wm. G.....1140 W. Boston Blvd., Detroit 2
McGough, Mrs. Joseph.....14574 Rutland, Detroit
McGraw, Mrs. Arthur B.....70 Kenwood Rd.,
Grosse Pointe 30
McIntosh, Mrs. R. D.....6529 Burnly, Garden City
McIntyre, Mrs. Wm.....1233 Audubon Rd.,
Grosse Pointe 30
McKeever, Mrs. G. E.....1767 Culver, Dearborn
McKnight, Mrs. Robert.....17364 Muirland, Detroit 21
McLean, Mrs. Don.....26760 Bloomfield Dr., Birmingham
McNichol, Mrs. L. J.....15033 Littlefield, Detroit 27
McRae, Mrs. Donald H.....259 W. Grand Blvd.,
Detroit 16
Meek, Mrs. Stuart E.....13020 Kilbourne, Detroit 4
Menagh, Mrs. Frank R.....4010 Columbus, Detroit 4
Merrill, Mrs. William O.....W. Long Lake Rd.,
Bloomfield Hills
Metes, Mrs. John S.....1261 Fairholme Rd.,
Grosse Pointe 36
Michael, Mrs. Michael J.....938 S. Renaud Rd.,
Grosse Pointe 36
Miller, Mrs. J. Martin.....17151 Stout, Detroit
Mitchell, Mrs. C. Leslie.....34 Hendrie Lane,
Grosse Pointe 36
Moehlig, Mrs. R. C.....17544 Muirland, Detroit 21
Molnar, Mrs. Stephen K.....434 S. Highland, Dearborn
Molner, Mrs. J. G.....14890 Glastonbury Rd., Detroit 23
Monson, Mrs. Robert C.....1070 N. Renaud,
Grosse Pointe 36
Monto, Mrs. Raymond W.....27879 Lathrup, Birmingham
Mopper, Mrs. Coleman.....18716 Littlefield, Detroit 21

Morgan, Mrs. Donald.....425 Manor,
Grosse Pointe Farms 36
Morley, Mrs. Harold V.....200 Hampshire Ct., Dearborn
Moroun, Mrs. Sheffick John.....203 Lakeland,
Grosse Pointe 30
Moses, Mrs. John W.....505 Townsend, Birmingham
Mossman, Mrs. John.....18914 Warrington, Detroit 21
Munson, Mrs. Henry.....466 Rivard, Grosse Pointe 30
Murray, Mrs. William A.....11841 Ohio, Detroit 4
Myers, Mrs. Dan W.....1150 Bedford Rd.,
Grosse Pointe 30
Nahigian, Mrs. Russell.....17371 Annchester, Detroit 21
Nehra, Mrs. John M.....662 S. Renaud Rd.,
Grosse Pointe 36
Nelson, Mrs. Darwin M.....63 Ridge Rd., Grosse Pointe 36
Newby, Mrs. Burns G.....11963 Wisconsin, Detroit
Nickel, Mrs. Warren.....3154 Lincoln, Dearborn 8
Norton, Mrs. A. B.....18615 Muirland Ave., Detroit 21
Noshay, Mrs. Wm. G.....25505 Wareham Dr.,
Huntington Woods
Novy, Mrs. Robert L.....2910 Iroquois, Detroit 14
Oetting, Mrs. Edward.....2923 Iroquois, Detroit 14
Ohmart, Mrs. Galen B.....2150 Iroquois, Detroit 14
Olmsted, Mrs. Geo. S.....3535 Burning Bush, Birmingham
Olson, Mrs. James A.....19 Norwich Rd., Pleasant Ridge
Oman, Mrs. C. F.....12608 Wyoming, Detroit 38
Ormond, Mrs. Robert.....9039 Annapolis, Detroit 4
O'Rourke, Mrs. Paul V.....17725 Manderson, Detroit
O'Sullivan, Mrs. G. S.....18129 Sunnybrook, Birmingham
Otlewski, Mrs. Eugene A.....4367 Grayton, Detroit 24
Owen, Mrs. Clarence I.....1544 Vinewood, Detroit 16
Parcells, Mrs. Frank H.....1014 Buckingham,
Grosse Pointe 30
Park, Mrs. Charles.....8414 Salem Lane, Dearborn
Parr, Mrs. Robert W.....18049 San Juan Dr., Detroit 21
Parsons, Mrs. John P.....808 Grand Marais, Grosse Pointe
Pasternacki, Mrs. Norbert.....7730 E. Jefferson, Detroit 14
Payne, Mrs. W. A.....357 Hillcrest, Grosse Pointe
Pedersen, Mrs. H. E.....381 Golfcrest Dr., Dearborn
Peggs, Mrs. G. F.....8303 Freda, Detroit 21
Pendy, Mrs. G. V.....20170 Renfrew, Detroit 21
Pendy, Mrs. J. M.....896 Lochmoor Blvd.,
Grosse Pointe Woods 30
Perkin, Mrs. Frank S.....325 Lakeland, Grosse Pointe
Peterman, Mrs. Earl A.....19515 Cumberland Way,
Detroit 3
Peterson, Mrs. Robert A.....17581 Prest, Detroit 35
Petty, Mrs. T. A.....1204 Yorkshire Rd.,
Grosse Pointe Park 30
Peven, Mrs. Philip.....19565 Roslyn, Detroit 35
Picard, Mrs. Joseph D.....501 Woodcrest, Dearborn
Pichette, Mrs. J. Walton.....627 Morley Ct., Dearborn
Pickard, Mrs. O. W.....20208 Lichfield, Detroit 21
Pietra, Mrs. Alex W.....1176 Bishop Rd., Grosse Pointe 30
Pingel, Mrs. James.....10637 W. 10 Mile Rd., Oak Park 37
Poirier, Mrs. R. A.....425 Bryn Mawr, Birmingham
Polentz, Mrs. C. P.....13450 Irvine, Oak Park
Porretta, Mrs. F. S.....8156 Normile, Detroit 4
Porter, Mrs. F. G.....19756 Lesure, Detroit 35
Posch, Mrs. Joseph L.....853 Brys Dr.,
Grosse Pointe Woods 36
Potter, Mrs. L. S.....287 Merriweather,
Grosse Pointe Farms 36
Pratt, Mrs. Jean P.....18910 Fairway Dr., Detroit 21
Priborsky, Mrs. Benjamin H.....3005 Iroquois, Detroit 14
Price, Mrs. Hazen.....18605 Birchcrest, Detroit 21
Priest, Mrs. Robert J.....9312 Faust, Detroit 28
Procailo, Mrs. Alexander B.....1940 N. Russell, Dearborn
Purcell, Mrs. Frank H.....869 Edgemont Park,
Grosse Pointe 30
Quigley, Mrs. Wm. G.....16540 Warwick, Detroit 19
Quinn, Mrs. E. L.....1141 Golfview, Birmingham
Ramsey, Mrs. R. H.....310 Riverlane, Dearborn
Rastello, Mrs. Peter.....4333 Sturtevant, Detroit 4
Rebuck, Mrs. John W.....16955 Beverly Rd., Birmingham
Redding, Mrs. Lowell G.....1104 Claremont, Dearborn

Redfern, Mrs. E. W.....17392 Kirkshire, Birmingham
Reed, Mrs. J. O., Jr.....448 Lincoln Rd., Grosse Pointe 30
Reed, Mrs. H. Walter.....8141 Dexter Blvd., Detroit 6
Reid, Mrs. Wesley G.....17556 Parkside, Detroit 21
Reive, Mrs. David L.....16002 Oak Drive, Livonia
Rennell, Mrs. Leo P.....18222 Fairfield, Detroit 21
Reveno, Mrs. Wm. S.....19398 Stratford Rd., Detroit 21
Reyner, Mrs. Clarence E.....19999 Stratford Rd.,
Detroit 21
Reynolds, Mrs. R. P.....17521 Hamilton Dr., Detroit 3
Rhoades, Mrs. F. P.....272 Ashland, Detroit 15
Rice, Mrs. H. R.....20420 Braircliff, Detroit 21
Ritter, Mrs. George.....28420 Sunset Dr.,
Lathrup Village, Birmingham
Rizzo, Mrs. Albert.....13505 Greiner, Detroit 5
Rizzo, Mrs. Paul.....14874 Seymour, Detroit 5
Robb, Mrs. Milton.....315 Lakeland, Grosse Pointe 30
Roeglin, Mrs. Orville F.....4386 Balfour, Detroit
Roman, Mrs. S. J.....25531 Avondale, Inkster
Ronayne, Mrs. J. J.....14042 Rutland, Detroit 27
Ross, Mrs. Donald G.....617 Neff, Grosse Pointe 30
Rotarius, Mrs. E. M.....1030 S. Brys Dr., Grosse Pointe 36
Rowda, Mrs. Michael S.....7 Cambridge Rd.,
Pleasant Ridge
Royer, Mrs. Richard R.....3533 Harvard, Detroit 24
Ruedemann, Mrs. Albert D.....1018 Three Mile Dr.,
Grosse Pointe 30
Ruedemann, Mrs. A. D., Jr.....242 Lewiston,
Grosse Pointe 36
Runge, Mrs. E. F.....25549 Rouge River Dr., Detroit
Rupp, Mrs. Jacob R.....51 Holbrook, Apt. 208, Detroit 2
Sadler, Mrs. Henry, Jr.....594 Rivard, Grosse Pointe 30
Sadzikowski, Mrs. J. T.....1320 N. Denwood, Dearborn
Sage, Mrs. Bernard A.....210 Woodcrest Dr., Dearborn
Sage, Mrs. Thomas.....379 St. Clair, Grosse Pointe 30
Salchow, Mrs. Paul T.....8285 Hartwell, Detroit 28
Sapala, Mrs. Andrew.....13021 Mackenzie Ave., Detroit 28
Sawyer, Mrs. Harold F.....8900 E. Jefferson, Apt. 718,
Detroit 14
Scarney, Mrs. Herman D.....5400 Pontiac Trail, Rt. 5,
Pontiac
Schillinger, Mrs. Harold K.....4838 Neckel, Dearborn
Schimek, Mrs. Robert A.....13720 Elgin, Oak Park
Schlafer, Mrs. Nathan H.....18420 Wildemere, Detroit 21
Schmaltz, Mrs. John D.....17656 Grandville, Detroit 19
Schmidt, Mrs. Werner F.....411 Roland Ct.,
Grosse Pointe 36
Schneck, Mrs. Robert J.....285 Voltar, Grosse Pointe
Schuknecht, Mrs. Harold F.....500 Neff Rd.,
Grosse Pointe 30
Schulte, Mrs. Carl H.....20171 Renfrew, Detroit 21
Schultz, Mrs. Clarence.....16010 Russell, Allen Park
Schwartz, Mrs. Oscar.....19538 Roslyn, Detroit 21
Schweigert, Mrs. C. F.....12185 E. Outer Dr., Detroit 24
Scott, Mrs. Gordon.....9 Fairwood, Pleasant Ridge
Seeley, Mrs. J. B.....7870 Oakman Blvd., Dearborn
Self, Mrs. W. G.....1067 Berkshire, Grosse Pointe 30
Sellers, Mrs. Chas. W.....2051 Chicago Blvd., Detroit 6
Sellers, Mrs. Graham.....3371 Sherbourne Rd., Detroit 21
Sewell, Mrs. George.....352 Elmhurst, Highland Park 3
Sharp, Mrs. Elwood.....635 Neff Rd., Grosse Pointe 30
Sharrer, Mrs. Chas. H.....1133 Grayton Rd.,
Grosse Pointe 30
Sherman, Mrs. Wm.....201 E. Kirby Ave., Detroit 2
Sherrin, Mrs. Edgar.....32 Oakland Park Blvd.,
Pleasant Ridge
Shifrin, Mrs. Peter G.....2005 Oakman Blvd., Detroit 38
Shreve, Mrs. A. J.....7 Amherst Lane, Dearborn
Shulman, Mrs. Herschel.....19350 Appoline, Detroit 35
Shumaker, Mrs. E. J.....17606 Wildemere, Detroit 21
Sieber, Mrs. Edward H.....5 Byfield Lane, Dearborn
Siefert, Mrs. Wm. A.....15920 Glastonbury Rd., Detroit 23
Sigler, Mrs. John W.....1356 Greenlawn, Birmingham
Simpson, Mrs. G. E.....602 Cadieux, Grosse Pointe 36
Sinclair, Mrs. James W.....5936 Hillcrest, Grosse Pointe 36
Singer, Mrs. Floyd W.....24441 Emerson, Dearborn

WAYNE COUNTY

(Southern Branch)

Alban, Mrs. E. T.....	15287	Philomene, Allen Park
Allen, Mrs. John V.....	15083	Regina, Allen Park
Beck, Mrs. Stanley, Jr.....	15649	Churchhill, Wyandotte
Bennett, Mrs. H. Stanley.....	29767	E. River Rd., Grosse Ile
Bott, Mrs. E. T.....	1804	13th St., Wyandotte
Bower, Mrs. Donald.....	1005	King's Hwy., Lincoln Park
Boyd, Mrs. John.....	2052	Church Place, Trenton
Braden, Mrs. R. G.....	25060	E. River Rd., Grosse Ile
Brown, Mrs. Chas.....	1729	Davis, Wyandotte
Brown, Mrs. Robert.....	22623	W. River Rd., Grosse Ile
Bruer, Mrs. Edgar.....	9037	Park Ave., Allen Park
Butler, Mrs. H.....	9415	Morton View, Dearborn
Cahalan, Mrs. Joseph L.....	13381	Catalpa, Wyandotte
Cameron, Mrs. A. H.....	155	Vinewood, Wyandotte
Coan, Mrs. Glenn L.....	19603	Park Lane, Grosse Ile
Cook, Mrs. Jas. A.....	2730	Twenty-first St., Wyandotte
Davis, Mrs. E. F.....	1493	23rd St., Wyandotte
Deering, Mrs. R. J.....	26255	W. River Rd., Grosse Ile
Durocher, Mrs. Raymond E.....	4160	Jefferson, Ecorse
Easterly, Mrs. Robert.....	2514	Eighteenth St., Wyandotte
Engel, Mrs. Earl.....	33	Emmons Court, Wyandotte
Erickson, Mrs. Eldon W.....	9720	Lakewood Ave., Grosse Ile
Firmschild, Mrs. Paul G.....	3644	Syracuse, Dearborn
Footo, Mrs. Jas. A.....	870	Winchester, Lincoln Park
Frothingham, Mrs. G. E.....	1657	23rd St., Wyandotte
Ganos, Mrs. Thomas.....	9238	Vine, Allen Park
Gilbert, Mrs. Harold R.....	13146	Phelps, Wyandotte
Herkimer, Mrs. Daniel R.....	1802	Buckingham Ave., Lincoln Park 25
Hileman, Mrs. Lee.....	755	New York Ave., Lincoln Park 25
Hoffer, Mrs. Thomas.....	1556	Walnut, Dearborn
Honor, Mrs. William H.....	20446	E. River Rd., Grosse Ile
Hookey, Mrs. John A.....	2872	Van Alstyne, Wyandotte
Jones, Mrs. W.....	15839	Crescent, Allen Park
Kazdan, Mrs. Morris.....	15024	McLain, Allen Park
Kelly, Mrs. John J.....	2820	22nd St., Wyandotte

Knaggs, Mrs. Earl J.....	13179 Phelps, Wyandotte
Knapp, Mrs. B. S.....	7536 Colwell, Allen Park
Knox, Mrs. Ross M.....	15400 Philomene Ave., Allen Park
Kowaleski, Mrs. John.....	9646 Vine St., Allen Park
Kuhn, Mrs. Richard F.....	27857 Elba, Grosse Ile
Kutsche, Mrs. John D.....	2616 Lenox Ave., Trenton
Kwasiborski, Mrs. Stanley.....	9495 Island, Grosse Ile
LaBerge, Mrs. J. M.....	1767 Ash St., Wyandotte
Lebamoff, Mrs. Alexander T.....	7427 Rosedale, Allen Park
Lewis, Mrs. J. Hugh.....	214 Superior Blvd., Wyandotte
Libbrecht, Mrs. R. B.....	15330 Wick Rd., Allen Park
Maibauer, Mrs. Frederick P.....	1742 Ash St., Wyandotte
Maynard, Mrs. F.....	14846 Harrison, Allen Park
McColl, Mrs. C.....	2285 21st St., Wyandotte
McLaughlin, Mrs. N. D.....	2062 22nd St., Wyandotte
Mikesell, Mrs. Wesley B., Jr.....	8615 Manor, Allen Park
Morley, Mrs. Arthur.....	2453 22nd St., Wyandotte
Nagle, Mrs. John W.....	26633 W. River Dr., Grosse Ile
Noe, Mrs. Joseph J.....	20665 W. River Rd., Grosse Ile
Proud, Mrs. R. F.....	29883 Red Cedar Dr., Flat Rock
Proud, Mrs. Robert H.....	29155 Evergreen, Flat Rock
Ray, Mrs. Kenneth.....	28059 Elba Dr., Grosse Ile
Ridge, Mrs. Ralph.....	3227 Van Alstyne Blvd., Wyandotte
Rinkel, Mrs. R. W.....	21800 Willoway Rd., Dearborn
Roberts, Mrs. A. J.....	859 Winchester, Lincoln Park 25
Rogers, Mrs. J. Dudley.....	2329 20th St., Wyandotte
Schroeder, Mrs. C. F.....	26505 E. River Rd., Grosse Ile
Schwarz, Mrs. Frank W.....	22051 Cleveland, Allen Park
Schwoco, Mrs. Niles.....	15917 Crescent Dr., Allen Park
Speck, Mrs. Carlos.....	14839 Markese, Allen Park
Stryker, Mrs. Walter.....	21604 E. River Rd., Grosse Ile
Szladek, Mrs. Frank J.....	28315 Elba Dr., Grosse Ile
Taurence, Mrs. Wm. H.....	2316 20th St., Wyandotte
Tenglia, Mrs. Thomas.....	820 King's Hwy., Lincoln Park
Thomson, Mrs. Daniel.....	18459 Park Lane, Grosse Ile
Van Becelaere, Mrs. L. A.....	21355 Knudsen, Grosse Ile
White, Mrs. Donald.....	1313 Cleveland Ave., Lincoln Park
Whitlock, Mrs. E. H.....	650 King's Hwy., Wyandotte
Worzniak, Mrs. Joseph.....	1639 Davis Ave., Wyandotte

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Clary, Mrs. Rudolph I.....	Dowagiac
Davis, Mrs. L. A.....	Camden
Day, Mrs. Luther W.....	206 Hilcrest, Jonesville
Hickman, Mrs. J. K.....	Dowagiac
Hodge, Mrs. C. I.....	415 S. Main St., Reading
Loupee, Mrs. S. L.....	108 Orchard, Dowagiac
MacNeal, Mrs. John A.....	122 S. Howell, Hillsdale
Matsson, Mrs. H. F.....	Baw Beese Lake, Hillsdale

Mullen, Mrs. Warren R.....	Pentwater
Pierce, Mrs. Kenneth C.....401 Spruce,	Dowagiac
Robinson, Mrs. William G.....	Hart
Sawyer, Mrs. W. W.....Baw Beese Lake,	Hillsdale
Strom, Mrs. Arthur.....141 Budlong,	Hillsdale
Vrbanac, Mrs. John J.....	Hart
Wood, Mrs. M. G.....	Hart
Zwergel, Mrs. Edward.....122 S. Fulton,	Cassopolis

Michigan State Medical Assistants' Society

Directory of Members, 1957

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		Kahler, Letha M.....	W. R. Birk, M.D. 146 E. State St., Hastings

CLARE COUNTY

Marth, Mrs. Lucy.....	Kuno Hammerberg, M.D. 403 S. McEwan Rd., Clare
-----------------------	---

EATON COUNTY

Copper, Mrs. Sally.....	R. E. Landick, M.D. 1118 Cochran, Charlotte	Paine, Mrs. Ruth.....	R. E. Landick, M.D. 1118 Cochran, Charlotte
-------------------------	--	-----------------------	--

GRAND TRAVERSE COUNTY

Downer, Mrs. Fern C.....	F. G. Swartz, M.D. 302 State Bank Bldg., Traverse City
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HILLSDALE COUNTY

Burnett, Mrs. Ellen.....	Ira W. Wiggins, M.D. 214 South St., Jonesville
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IONIA COUNTY

Stephens, M. Frances.....	J. H. Buck, M.D. J. D. Snider, M.D. 111 N. Kidd St., Ionia
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LENAWEE COUNTY

Loyd, Miss Barbara.....	A. R. O'Connor, M.D. 122 Locust St., Clinton
-------------------------	---

MACOMB COUNTY

Maxwell, Mrs. Harry.....	Russell F. Salot, M.D. Peter V. Kane, M.D. 711 Monitor Leader Bldg., Mt. Clemens
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ST. CLAIR COUNTY

Tepper, Mrs. Ina.....	J. L. Sanderson, M.D. 515 Pine St., Port Huron
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WAYNE COUNTY

Clark, Jessie Elizabeth.....	F. B. Williamson, M.D. 47064 McBride, Belleville	Sanders, Elizabeth.....	S. P. Grillo, M.D. 265 Main St., Belleville
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Organized Counties

ALLEGAN COUNTY

Number of Members, 15

Ater, Virginia.....	Harry Schneider, M.D. 111½ Locust St., Allegan	Czerwinski, Wilma.....	L. F. Brown, M.D. Otsego
Bronkhorst, Maxine.....	Elvin Top, M.D. Plainwell	Hitchcock, Helen.....	A. Peter Brachman, M.D. 222 Trowbridge St., Allegan

Kreighbaum, Doris.....O. Stuck, M.D.
Otsego
Lea, Jeanette.....Harry Schneiter, M.D.
111½ Locust St., Allegan
Marciniak, Betty.....Elvin Top, M.D.
Plainwell
McIntyre, Maxine.....Roscoe McFadden, M.D.
Bloomingtondale
Pullen, Louise.....A. Peter Brachman, M.D.
222 Trowbridge St., Allegan

Rantz Mary Jane.....Plainwell Sanatorium, Plainwell
Reimink, Betty.....A. Peter Brachman, M.D.
222 Trowbridge St., Allegan
Spreitzer, Cecelia.....James E. Mahan, M.D.
Trowbridge St., Allegan
Wilkinson, Audrey.....Allegan Health Center, Allegan
Wilson, Phyllis.....Plainwell Sanatorium, Plainwell
Wynne, Florence.....Allegan Health Center, Allegan

BAY COUNTY

Number of Members, 40

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Bowsher, Patricia.....M. J. Dardas, M.D.
1413 Center Ave., Bay City
Bublitz, Arlene.....H. C. Shafer, M.D.
101 W. John St., Bay City
Byrnes, Gloria.....G. M. Brown, M.D.
J. N. Asline, M.D.
O. J. Johnson, M.D.
E. J. Kulinski, M.D.
205 N. Walnut St., Bay City
Cowan, Doris.....G. M. Brown, M.D.
J. N. Asline, M.D.
O. J. Johnson, M.D.
E. J. Kulinski, M.D.
205 N. Walnut St., Bay City
DeLorge, Helen.....S. M. Pearson, M.D.
101 W. John St., Bay City
Duchanc, Patricia.....Paul N. DeWaele, M.D.
1106 N. Johnson, Bay City
Elbinger, Marian.....James Wilcox, M.D.
1115 Fifth St., Bay City
Fiebke, Helen.....G. M. Brown, M.D.
J. N. Asline, M.D.
O. J. Johnson, M.D.
E. J. Kulinski, M.D.
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Fischer, Ruth.....G. M. Brown, M.D.
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O. J. Johnson, M.D.
E. J. Kulinski, M.D.
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207 Davidson Bldg., Bay City
Hogle, Martha.....W. R. McDonnell, M.D.
W. L. Howland, M.D.
Pinconning
Hohman, Ann.....G. M. Brown, M.D.
J. N. Asline, M.D.
O. J. Johnson, M.D.
E. J. Kulinski, M.D.
207 N. Walnut St., Bay City
Karrick, Lee.....G. M. Brown, M.D.
J. N. Asline, M.D.
O. J. Johnson, M.D.
E. J. Kulinski, M.D.
207 N. Walnut St., Bay City
Kaunitz, Altha.....C. W. Reuter, M.D.
101 W. John St., Bay City
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Doane, Kay.....	Francis Lam, M.D. 408 S.W. Capitol Ave., Battle Creek	Roberts, Joan.....	R. J. Campbell, M.D. J. R. Power, M.D. Alfred Hamady, M.D. 140 N.E. Capitol, Battle Creek
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GENESEE COUNTY

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Elliott, Mrs. Selma, R.N.....	W. H. Morrison, M.D. 205 Perry Rd., Grand Blanc	Lundgren, Ethel E.....	John Lukens, M.D. 608 E. Court St., Flint

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312 Patterson Bldg.
Martin, Katherine.....J. R. Grommons, M.D.
N. Saginaw St., Durand
Moore, Ruth.....M. L. Sorkin, M.D.
W. H. Willard, M.D.
G. Zeis, M.D.
718 Beach St., Flint
Neault, Mrs. Virginia, R.N.....F. H. Steinman, M.D.
734 Mott Bldg., Flint
Nylander, Janet.....W. H. Morrison, M.D.
205 Perry Rd., Grand Blanc
O'Berry, Emily.....C. E. Hurd, M.D.
300 Roberts St., Fenton
Papas, Mildred.....McLaren General Hosp.
Record Room, Flint
Pasco, Irene.....C. E. Hurd, M.D.
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Schlottman, Agnes.....A. J. Miltich, M.D.
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302 W. Pierson Rd., Flint
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1402 Davison Rd., Flint
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Taylor, Mildred.....L. D. Kaufman, M.D.
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Ankney, Mrs. Elizabeth.....R. A. Burhans, M.D.
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M. Heerdt, M.D.
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Bennett, Mrs. Sally.....I. E. Silverman, M.D.
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Blair, Cora.....S. P. Fortino, M.D.
203 Bauch Bldg., Lansing
Boyd, Mrs. Geneva.....R. W. Pomeroy, M.D.
609 N. Washington Ave., Lansing
Brandis, Mrs. Dorothy.....C. J. Stringer, M.D.
401 W. Greenlawn, Lansing
Bruner, Mrs. Jane.....W. O. Bradley, M.D.
624 N. Capitol Ave., Lansing
Clifton, Mrs. Mary.....David Kahn, M.D.
401 American St. Bank Bldg., Lansing
Cochran, Mrs. Leota.....L. R. McElmurry, M.D.
N. Walnut St., Lansing
Cotter, Mrs. Virginia.....Harry LeVett, M.D.
117½ W. Shiawassee, Lansing
Crossley, Mrs. MaryLou.....R. S. Breakey, M.D.
1211 Bank of Lansing Bldg., Lansing
Darlington, Mrs. Marion.....R. S. Breakey, M.D.
1211 Bank of Lansing Bldg., Lansing
Dean, Mrs. Pauline.....C. Holland, M.D.
125 W. Saginaw, Lansing
Dothsuk, Mrs. Rita.....Justin Sleight, M.D.
117½ W. Shiawassee, Lansing
England, Mrs. Helen.....Harry L. LeVett, M.D.
117½ W. Shiawassee, Lansing
Gilmore, Mrs. Sandra.....W. D. Hayford, M.D.
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Grams, Carol.....D. M. LeDuc, M.D.
317 W. St. Joseph, Lansing
Hathaway, Mrs. Florence.....D. C. Asselin, M.D.
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517 S. Grand Ave., Lansing
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930 N. Washington Ave., Lansing
Kimball, Mrs. Gloria.....L. A. Drolett, M.D.
3526 W. Saginaw, Lansing

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McAttee, Mrs. Helen.....S. H. Rutledge, M.D.
110 W. Hillsdale, Lansing
Miller, Mrs. Donna.....P. C. Spencer, M.D.
320 Townsend, Lansing
Mocere, Mrs. Dona.....W. D. Hayford, M.D.
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Monk, Mary.....R. Worthington, M.D.
532 Tussing Bldg., Lansing
Moore, Mrs. Georgia.....S. P. Fortino, M.D.
203 Bauch Bldg., Lansing
Mulliner, Mrs. Bobra.....J. Sleight, M.D.
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Peterson, Mrs. Nora.....J. Wellman, M.D.
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Porterfield, Ruth.....P. C. Spencer, M.D.
918 N. Chestnut, Lansing
Preston, Mrs. Earlene.....B. J. Stone, M.D.
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317 W. St. Joseph
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624 N. Capitol, Lansing
Wolcott, Mrs. Trudy.....M. L. Richardson, M.D.
X-Ray Dept., Sparrow Hospital, Lansing
Woolhouse, Mrs. Marguerite.....M. S. Shaw, M.D.
320 Townsend St., Lansing
Wygant, Mrs. Catherine.....D. Johnson, M.D.
320 Townsend St., Lansing

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Brinkerhoff, Nancy Lou.....H. W. Porter, M.D.
505 Wildwood Ave., Jackson
Burdick, Mrs. Thelma L.....J. E. Ludwick, M.D.
J. P. Ludwick, M.D.
237 W. Washington Ave., Jackson
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J. P. Ludwick, M.D.
237 W. Washington Ave., Jackson
Cass, Mrs. Evelyn.....John Scott, M.D.
432 W. Michigan Ave., Jackson
Collins, Mrs. Marion G.....Robert Medlar, M.D.
719 17th St., Jackson
Craft, Mrs. Martha.....F. I. Van Wagnen, M.D.
City Health Department, Jackson
Doherty, Betty, R.N.....Ennis H. Corley, M.D.
1401 Reynolds Bldg., Jackson
Desnoyer, Mrs. Elizabeth R.....H. W. Porter, M.D.
505 Wildwood Ave., Jackson
Ferman, Mrs. Juanita, R.N.....Grant L. Otis, M.D.
525 Wildwood Ave., Jackson
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Michigan Center
Guss, Mrs. Vivian V.....A. O. Abraham, M.D.,
Hudson
Hansen, Mrs. Francis, R.N.....W. A. Wickham, M.D.
420 W. Michigan Ave., Jackson
Harris, Elaine.....Edward C. Lake, M.D.
612 First St., Jackson
Hill, Mrs. Hildred.....T. L. Hackett, M.D.
519 N. East Ave., Jackson
Hoeg, Mrs. Ruth C.....J. E. Ludwick, M.D.
J. P. Ludwick, M.D.
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Hunter, Mrs. Phyllis.....George Hardie, M.D.
290 W. Michigan Ave., Jackson
Jeffery, Mrs. Beth.....Don F. Kudner, M.D.
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502 W. Michigan Ave., Jackson
Krolikowski, Mrs. Louise, R.N.....E. L. Stone, M.D.
721 17th St., Jackson
Lantis, Mrs. Pearl Helen.....E. A. Thayer, M.D.
1104 Nat'l Bank Bldg., Jackson
Latham, Mrs. Patty.....Jack P. Bentley, M.D.
404 McNeal St., Jackson
Licking, Mrs. Shirley.....George Hardie, M.D.
290 W. Michigan Ave., Jackson
May, Mrs. Sue.....J. P. Karr, M.D.
502 W. Michigan Ave., Jackson
McArthur, Mrs. Betty H.....E. E. Vivirski, M.D.
603 S. Elm St., Jackson
Morgan, Mrs. Beverly.....Associate

Nanry, Mrs. Carolyn.....Edward C. Lake, M.D.
612 First St., Jackson
Paul, Anna, R.N.....H. Greenbaum, M.D.
1203 Greenwood Ave., Jackson
Petersen, Mrs. Donna Jean (Mitchell).....R. G. Ries, M.D.
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Phillips, Mrs. Clara Anne (Schultz).....Lloyd Olsen, M.D.
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Phelps, Mrs. Evelyn E.....J. P. Ludwick, M.D.
J. E. Ludwick, M.D.
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Carl Stolberg, M.D.
517 Wildwood Ave., Jackson
Rowen, Mrs. Jane.....Dean Smith, M.D.
500 W. Michigan Ave., Jackson
Russell, Mrs. Gertrude.....B. H. Growt, M.D.
Addison
Russo, Mrs. Ruth, R.N.....W. A. Joerin, M.D.
612 First St., Jackson
Rutan, Cecil.....John Van Schoick, M.D.
Hanover
Seagert, Mrs. Vedah.....A. M. Sirhal, M.D.,
Brooklyn
Shirley, Sally A.....H. W. Porter, M.D.
505 Wildwood Ave., Jackson
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421 McNeal, Jackson
Smith, Mrs. Dorothy.....A. M. Shaeffer, M.D.
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Stiffler, Wandalee.....R. G. Ries, M.D.
612 First St., Jackson
Tierney, Mrs. Helen F.....Record Room
Mercy Hospital, Jackson
Todd, Mrs. Margaret.....Sam Sugar, M.D.
509 Reynolds Bldg., Jackson
Urschaltz, Connie M.....W. R. Stackable, M.D.
439 Wildwood Ave., Jackson
Vandermale, Mrs. Helen.....Dale Shaeffer, M.D.
1615 Carlton Blvd., Jackson
Walborn, Mrs. Zeulah.....M. E. Hunt, M.D.
2534 Francis St., Jackson
Whitmore, Mrs. Marion.....R. C. Deming, M.D.
Carl Stolberg, M.D.
517 Wildwood Ave., Jackson
Williams, Mrs. Catherine.....J. E. Ludwick, M.D.
J. P. Ludwick, M.D.
237 W. Washington, Jackson
Williams, Mrs. Gladys.....C. R. Dengler, M.D.
305 Carter Bldg., Jackson
Williams, Mrs. Margaret A., R.N.....George Hardie, M.D.
290 W. Michigan Ave., Jackson
Woody, Mrs. Carlene Grace.....B. H. Growt, M.D.
Addison

KALAMAZOO COUNTY

Number of Members, 105

Angel, Mrs. Lila.....	K. R. Currier, M.D. D. A. Haddock, M.D. 6646 Portage St., Kalamazoo	Fessenden, Hazel.....	R. Armstrong, M.D. W. Marshall, M.D. K. Slatmyer, M.D. 605 Hanselman Bldg., Kalamazoo
Ash, Mrs. Charlotte.....	H. Stryker, M.D. G. Howard, M.D. R. E. DeLong, M.D. Borgess Hospital, Kalamazoo	Foreman, Mrs. Donna.....	R. J. Hubbell, M.D. R. N. Kilgore, M.D. 252 E. Lovell St., Kalamazoo
Axtell, Mrs. Pauline.....	R. C. Hildreth, M.D. J. C. Volderauer, M.D., E. O. Pearson, M.D. C. P. Chrest, M.D. W. S. Gladstone, M.D. 458 W. South St., Kalamazoo	Fox, Mrs. Frances.....	W. G. Hoebeke, M.D. W. G. Birch, M.D. C. O. Peake, M.D. 252 E. Lovell St., Kalamazoo
Baeuerle, Mrs. Ardis.....	Jas. W. Loynd, M.D. 1324 S. Park St., Kalamazoo	Fox, Patricia.....	R. W. Burrell, M.D. 907 American Nat'l Bank Bldg., Kalamazoo
Bird, Mrs. Vurdie.....	Norman DeWitt, M.D. 803 Hanselman Bldg., Kalamazoo	Francis, Inez.....	S. E. Andrews, M.D. F. C. Cretsinger, M.D. 224 E. Cedar St., Kalamazoo
Blanchard, Mrs. Nancy R.....	R. C. Hildreth, M.D. J. C. Volderauer, M.D. E. O. Pearson, M.D. C. P. Chrest, M.D. W. S. Gladstone, M.D. 458 W. South St., Kalamazoo	Frazier, Elsie I.....	R. C. Hildreth, M.D. J. C. Volderauer, M.D. E. O. Pearson, M.D. C. P. Chrest, M.D. W. S. Gladstone, M.D. 458 W. South St., Kalamazoo
Boes, Mrs. Ileana.....	E. G. Betz, M.D. H. E. DePree, M.D. 252 E. Lovell St., Kalamazoo	Gaulzetti, Mrs. Shirley.....	E. G. Betz, M.D. H. E. DePree, M.D. 252 E. Lovell St., Kalamazoo
Brainard, Mrs. Norine.....	P. F. Cooper, M.D. C. G. Callander, M.D. 252 E. Lovell St., Kalamazoo	Goff, Mrs. Mildred.....	S. E. Andrews, M.D. F. C. Cretsinger, M.D. 224 E. Cedar St., Kalamazoo
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Brown, Mrs. Alice.....	W. G. Hoebeke, M.D. W. G. Birch, M.D. C. O. Peake, M.D. 252 E. Lovell St., Kalamazoo	Haessing, Mrs. Gertrude.....	Maynard Southworth, M.D. Stanley Michael, M.D. Schoolcraft
Buiskool, Evelyn.....	Roger Scholten, M.D. 252 E. Lovell St., Kalamazoo	Halbert, Mrs. Elizabeth.....	C. A. Alexander, M.D. 118 W. North St., Kalamazoo
Burkam, Mrs. Bethel.....	Robert D. Warnke, M.D. 909 American Nat'l Bank Bldg., Kalamazoo	Hays, Mrs. Louise.....	W. J. Klerk, M.D. 914 S. Burdick St., Kalamazoo
Byington, Virginia.....	John Fopeano, M.D. 815 American Nat'l Bank Bldg., Kalamazoo	Hayworth, Mrs. Lucille.....	Norman De Witt, M.D. 803 Hanselman Bldg., Kalamazoo
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Douglass, Mrs. Catherine.....	M. A. MacDonald, M.D. 252 E. Lovell St., Kalamazoo	Johnson, Mrs. Nancy.....	M. M. Conrad, M.D. C. M. Hanson, M.D. R. M. Cashen, M.D. 252 E. Lovell St., Kalamazoo
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Duyser, Mrs. Dorothy.....	L. R. Banner, M.D. F. C. Ryan, M.D. 507 S. Burdick St., Kalamazoo	Ketchum, Mrs. Jacqueline.....	B. A. Appel, M.D. W. Appel, M.D. 252 E. Lovell St., Kalamazoo
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Ellwood, Maxine.....	R. B. Fast, M.D. W. K. Locklin, M.D. C. A. Gardner, M.D. 1410 American Nat'l Bank Bldg., Kalamazoo	Koch, Mrs. Wilma.....	Kalamazoo State Hospital Box A, Kalamazoo
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Everhart, Mrs. Dorothy.....	R. J. Hubbell, M.D. R. N. Kilgore, M.D. 252 E. Lovell St., Kalamazoo	Laity, Helen.....	E. G. Betz, M.D. H. E. DePree, M.D. 252 E. Lovell St., Kalamazoo
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Farwell, Mrs. Dessie.....	R. W. Shook, M.D. 618 American Nat'l Bank Bldg., Kalamazoo	Lierman, Joan.....	M. M. Conrad, M.D. C. M. Hanson, M.D. R. M. Cashen, M.D. 252 E. Lovell St., Kalamazoo

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Pratt Bldg., Kalamazoo

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Daniel Glaser, M.D.
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Root, Hazel.....Matthew Peelen, M.D.
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C. M. Hanson, M.D.
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Strunk, Eleanor.....Matthew Peelan, M.D.
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E. O. Pearson, M.D.
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M. D. Verhage, M.D.
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KENT COUNTY

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OAKLAND COUNTY

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Brewer, Mrs. Audrey.....	Holland City Hospital 268 N. River Ave., Holland		

Garvelink, Beverly.....Holland City Hospital
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Jones, Mrs. Helen.....Grand Haven Municipal Hosp.
Grand Haven
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Sikkel, Antoinette.....Holland City Hospital
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Sluital, Allegra.....Grand Haven Municipal Hosp.
Grand Haven
Wiegerink, Mary.....Grand Haven Municipal Hosp.
Grand Haven

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Burns, Mrs. Laura.....St. Mary's Hospital
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Cummins, Hallie.....Caro State Hosp. for Epileptics
Caro
Dark, Kathryn.....Saginaw County Hospital
Hospital Road, Saginaw
Dawson, Mrs. Lois.....Thomas P. Mahaney, M.D.
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Plettenberg, Mrs. Mary.....Gerald Ackerman, M.D.
124 S. Jefferson Ave., Saginaw
Porath, Mrs. Beverly.....Robert Powers, M.D.
529 W. Genesee Ave., Saginaw
Pushehl, Mrs. Georgiann.....Associate Member
312 N. Charles St., Saginaw
Ranzenberger, Mrs. Rosalinn.....Associate Member
2114 Hill St., Saginaw
Reynolds, Mrs. Dorthea.....Associate Member
1006 S. Warren St., Saginaw
Roberts, Mrs. Edna.....Martin C. Sharp, M.D.
1803 N. Michigan Ave., Saginaw
Roseberry, Mrs. Evelyn.....Bert Bullington, M.D.
2000 Court St., Saginaw
Russell, Mrs. Ruth.....Saginaw General Hospital
1447 N. Harrison St., Saginaw
Scheanwald, Marjorie.....D. V. Sargent, M.D.
1703 N. Michigan Ave., Saginaw
Seabrook, Mrs. Muril.....Edward F. Kickham, M.D.
309 S. Jefferson Ave., Saginaw
Seibel, Mrs. Doris J.....A. W. Farley, M.D.
1803 N. Michigan Ave., Saginaw
Smith, Patricia K.....Saginaw General Hospital
1447 N. Harrison St., Saginaw

Smith, Mrs. Yvonne.....E. G. Hester, M.D.
2031 N. Michigan Ave., Saginaw
Stone, Mrs. Marion.....Saginaw General Hospital
1447 N. Harrison St., Saginaw
Swift, Mrs. Marian.....Eugene A. Hand, M.D.
211 Bearing Bldg., Saginaw
Tedhams, Mrs. Phyllis.....T. V. Kretschmer, M.D.
304 Wiechmann Bldg., Saginaw
Thompson, Margaret.....Stuart Yntema, M.D.
331 S. Jefferson Ave., Saginaw
Toth, Dorothy.....Saginaw General Hospital
1447 N. Harrison St., Saginaw
Urban, Mrs. Betty.....Associate Member
1500 S. Jackson St., Bay City
Ure, Nancy Kay.....J. Meadows, M.D.
1839 N. Michigan Ave., Saginaw
Wackowski, Mrs. Virginia.....Associate Member
2312 Hosmer St., Saginaw
Wade, Margaret.....Ivan Roggen, M.D.
1227 N. Michigan Ave., Saginaw
Wahl, Harriet.....F. J. Busch, M.D.
1731 N. Michigan Ave., Saginaw
Wallgren, Janice.....Harry Richter, M.D.
Second National Bank Bldg., Saginaw
Walther, Mrs. Josephine.....Associate Member
1921 Stark St., Saginaw
Ward, Mrs. Betty.....Charles R. Murray, M.D.
1827 N. Michigan Ave., Saginaw
Willert, Mrs. Dorothy.....M. J. Murray, M.D.
603 S. Jefferson Ave., Saginaw
Williams, Mrs. Donna.....Frances M. Choate, M.D.
1213 N. Michigan Ave., Saginaw
Witherspoon, Jean.....Arno W. Weiss, M.D.
3521 State St., Saginaw
Worrall, Mrs. Inez.....Saginaw General Hospital
1447 N. Harrison St., Saginaw
Wotton, Mrs. Lucille.....Caro State Hosp. for Epileptics
Caro

UPPER PENINSULA

Number of Members, 37

Ahola, Miriam N.....A. J. Janis, M.D.
208 Quincy St., Hancock
Ahti, Shirley Ann.....D. P. Hornbogen, M.D.
101 S. Front St., Marquette
Barber, Mary Ann.....C. H. Clauson, M.D.
Polyclinic, Sault Ste Marie
Booth, Mrs. Mabel M.....W. F. Mertaugh, M.D.
Adams Bldg., Sault Ste Marie
Cook, Mr. Kenneth.....T. J. Trapasso, M.D.
521 Ashmun St., Sault Ste Marie
Decaire, Mrs. Beatrice.....Mich. Dept. of Health
Houghton
Dyer, Mrs. Virginia W.....H. M. Harrington, M.D.
A. G. Venier, M.D.
519 Ashmun St., Sault Ste Marie
Fountain, Reva Faye.....Sault Polyclinic
300 Court St., Sault Ste Marie
Gilroy, Mrs. E. Gertrude.....Sault Polyclinic
300 Court St., Sault Ste Marie
Heide, Mary Margaret.....P. S. Sloan, M.D.
609 Shelden Ave., Houghton
Karam, Anne Julia.....F. W. Larson, M.D.
322 Shelden Ave., Houghton
Kovala, Dorothy Ann.....Copper County Sanatorium
Hancock
Krol, Phyllis Marie.....B. T. Montgomery, M.D.
545 Cedar St., Sault Ste Marie
La Fleur, Patricia.....V. E. Lepisto, M.D.
414 Hecla St., Laurium
Levin, Mrs. Betty Lee.....Sault Polyclinic
300 Court St., Sault Ste Marie
Little, Mr. Norman Edward.....H. M. Blair, M.D.
300 Court St., Sault Ste Marie

Lucas, Joan Mary.....Sault Polyclinic
300 Court St., Sault Ste Marie
Meline, Mrs. Shirley Jean.....Donald R. Smith, M.D.
100 West A. St., Iron Mountain
Mitchell, Dorothy E.....Sault Polyclinic
300 Court St., Sault Ste Marie
Mitchell, Joanne Verne.....A. B. Aldrich, M.D.
503 Shelden Ave., Houghton
Nault, Emily C.....W. H. Alexander, M.D.
R. E. Carlson, M.D.
Commercial Nat'l Bank Bldg., Iron Mountain
Neal, Constance.....Sault Polyclinic
300 Court St., Sault Ste Marie
Nelson, Mrs. Emma R.....R. E. Gibson, M.D.
207 W. John St., Newberry
Pangborn, Mr. Wayne Daniel.....Copper County District
Health Dept., Houghton
Pietila, Mrs. Julia Ann.....F. W. Larson, M.D.
322 Shelden Ave., Houghton
Ripley, Mrs. Kathryn F.....E. S. Rhind, M.D.
300 Court St., Sault Ste Marie
Romano, Mary M.....Copper County TB Sanatorium
Hancock
Routhier, Mrs. Alda A.....T. J. Trapasso, M.D.
521 Ashmun St., Sault Ste Marie
Somariva, Mrs. Florence M.....Copper County TB
Sanatorium, Hancock
Stephens, Mary.....James H. Fyvie, M.D.
202 S. Cedar St., Manistiquet
Stevens, Mrs. Elizabeth M.....A. G. Venier, M.D.
H. M. Harrington, M.D.
519 Ashmun St., Sault Ste Marie

Stewart, Iva Marie.....T. B. Macki, M.D.
Sault Polyclinic, Sault Ste Marie
Thompson, Dagmar L.....James H. Fyvie, M.D.
202 S. Cedar St., Manistique
Warner, Mrs. Anna B.....A. B. Aldrich, M.D.
503 Shelden Ave., Houghton

Weiger, Mrs. Evelyn G.....Lloyd W. Howe, M.D.
101 S. Front St., Marquette
Whittaker, Mrs. Mary Anne.....T. P. Wickliffe, M.D.
219 Sixth St., Calumet
Zychowski, Mr. John.....Copper County TB
Sanatorium, Hancock

VAN BUREN COUNTY

Number of Members, 20

Augustyniak, Mrs. Marianne.....E. Terwilliger, M.D.
D. Morgan, M.D.
South Haven
Brown, Mrs. Katherine.....Paw Paw Medical Group
Paw Paw
Canham, Mrs. Jessie.....A. E. Parks, M.D.
Lawton
Cornish, Mrs. Lucille.....Wm. Rae Young, M.D.
Lawton
Dannison, Mrs. Cecile.....Bert Diephus, M.D.
South Haven
Huey, Mrs. Grace.....Charles Ten Houten, M.D.
Paw Paw
Jensen, Mrs. Eleanor.....M. W. Buckborough, M.D.
South Haven
Jewett, Mrs. Maxine.....Paw Paw Medical Group
Paw Paw
Keeney, Mrs. Ruth.....E. Terwilliger, M.D.
D. Morgan, M.D.
South Haven
King, Mrs. Barbara.....Paw Paw Medical Group
Paw Paw
Lamoreaux, Mrs. Meta.....F. J. Loomis, M.D.
Paw Paw

Lennig, Mrs. Freida.....J. Itzen, M.D.
J. Kleber, M.D.
South Haven
Lind, Sally.....D. Morgan, M.D.
E. Terwilliger, M.D.
South Haven
Magyar, Mrs. Betty.....Arthur H. Steel, M.D.
Paw Paw
McCone, Mrs. Norma.....M. Buckborough, M.D.
B. Diephus, M.D.
South Haven
Novy, Mrs. Ethel.....J. Itzen, M.D.
J. Kleber, M.D.
South Haven
Schlee, Mrs. Grace.....M. Buckborough, M.D.
B. Diephus, M.D.
South Haven
Stafford, Mrs. Katherine.....Evan L. Copeland, M.D.
Decatur
Walker, Bessie.....A. E. Parks, M.D.
Lawton
Warmbold, Mrs. Alberta.....Charles Ten Houten, M.D.
Paw Paw

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Michigan State Medical Society

Constitution

ARTICLE I—NAME

Section 1. The name of this organization shall be The Michigan State Medical Society.

ARTICLE II—COMPONENT COUNTY SOCIETIES

Section 1.—Component County Societies.

Component County Societies shall consist of those County Medical Societies which hold charters from this State Medical Society.

Sec. 2.—Geographical Scope.

Only one component County Society shall be chartered in any one county of the State; provided, however, when in the judgment of the House of Delegates it is deemed to be to the best interests of this Society, a charter may be granted to a component County Society comprising two or more counties.

ARTICLE III—PURPOSES

Section 1. To bring into one organization the Doctors of Medicine of this State of Michigan, and through it and other similar societies of other states to form and maintain the American Medical Association.

Sec. 2. To maintain a program of educational service to the public on matters of health and hygiene.

Sec. 3. To encourage among members of the medical profession the interchange of views on all phases of professional advancement and thus better to equip each member of the profession to serve society and promote the public health.

Sec. 4. To maintain a program of scientific education for the members of The Society keyed to the constantly developing discoveries in the field of medicine; and to foster, encourage and co-ordinate postgraduate facilities for the medical profession as a whole.

Sec. 5. To disseminate advances in medical research among the profession generally, by the issuance of scientific publications.

Sec. 6. To maintain and to advance the standards of medical practice in this State with respect to the highest concepts of ethics.

Sec. 7. To acquire and hold such real and personal property as may be necessary for the full and proper execution of the corporate purposes as detailed herein.

Sec. 8. To carry on such organization, functions and activities as are deemed necessary to accomplish effectively the above purposes; provided, however, that the Society shall engage in no activities that cannot be construed as relevant, incidental or necessary to its charitable, educational and scientific purposes.

ARTICLE IV—DIVISIONS

Section 1. This Society as a State unit of the American Medical Association, and as the State expression of the County Societies of Michigan, shall have three major divisions.

1. The Society as a whole, as when it meets in Annual Session.

2. The Scientific Assembly with its subordinate or related bodies.

3. The House of Delegates with its subordinate or related bodies.

ARTICLE V—THE SOCIETY AS A WHOLE

Section 1. The Society as a whole shall hold an Annual Session at such time and place and of such duration as the House of Delegates may determine. This

power may be delegated to The Council or to the Executive Committee of The Council by the House of Delegates.

ARTICLE VI—SCIENTIFIC ASSEMBLY

Section 1. The Scientific Assembly of this Society is the convocation of its members for the presentation and discussion of subjects pertaining to the science and art of medicine, its allied specialties and the problems of public health conservation.

ARTICLE VII—HOUSE OF DELEGATES

Section 1. The House of Delegates shall be the legislative body of the Michigan State Medical Society and shall consist of Delegates elected by component County Societies and Delegates-at-Large, as prescribed by the By-Laws.

ARTICLE VIII—MEMBERS

Section 1. This Society shall consist of active members, honorary members, associate members, retired members, life members and military members, elected in accordance with the By-Laws.

ARTICLE IX—OFFICERS AND ELECTED REPRESENTATIVES

Section 1. The officers of this Society shall be a President; a President-Elect; a Treasurer; a Secretary; a Speaker and a Vice Speaker of The House of Delegates; and Councilors.

Sec. 2. The elected representatives of this Society shall be the Delegates and the Alternate Delegates to the House of Delegates of the American Medical Association.

ARTICLE X—THE COUNCIL

Section 1. The Council shall be the Executive Body of the Society. It shall consist of one Councilor from each Councilor District, the President, President-Elect immediate Past President, Speaker of the House of Delegates, with the Secretary and the Treasurer, the last two being elected by the foregoing. It shall have the custody and entire control of all funds and property of the Society and shall act for the Society as a Whole and for The House of Delegates between sessions.

Sec. 2. The Executive Committee of The Council shall consist of its Chairman, Vice Chairman, Chairman of the Finance Committee, Chairman of the County Societies Committee, Chairman of the Publication Committee, President, President-Elect, Secretary, Treasurer and the Speaker of the House of Delegates. It shall act for the Society as a whole and for the House of Delegates between sessions of The Council, except that a policy established by the House of Delegates or by The Council shall not be changed.

Sec. 3. The Vice Speaker shall be a member of The Council and the Executive Committee without vote except in the absence of the Speaker.

ARTICLE XI—FUNDS AND EXPENSES

Section 1. Funds for meeting the expenses of the Society shall be raised by annual dues, special assessments and voluntary contributions.

Sec. 2. Annual membership dues and assessments shall be fixed by the House of Delegates.

ARTICLE XII—AMENDMENTS

Section 1. The House of Delegates may amend any article of this Constitution by a two-thirds vote of the Delegates seated at any Annual Session, provided that

such amendment shall have been presented in open meeting at the previous Annual Session, and that it shall have been published at least once during the year in THE JOURNAL of the Society, or sent officially to each

component County Society at least two months before the meeting at which final action is to be taken.

Sec. 2. This Constitution or any amendment thereto shall become effective immediately upon its adoption.

By-Laws

CHAPTER 1—COMPONENT COUNTY SOCIETIES

Section 1. The charter of each component County Society shall require that each of the provisions of the Constitution and By-Laws of the Michigan State Medical Society, together with each amendment to either thereof, hereafter adopted, in so far as the same is applicable, shall be an integral part of the Constitution and By-Laws of the component County Society to which a charter is issued and shall in no way be inconsistent with the Constitution and By-Laws of the Michigan State Medical Society. Each charter shall be authorized by the House of Delegates and signed by the President and the Secretary of this Michigan State Medical Society.

Sec. 2. The House of Delegates is empowered to revoke the charter of any Component County Society whenever it finds that such Society has materially breached any of the provisions of the Constitution or By-Laws of this State Society or has failed to function within the expressed spirit and purpose of this State Society to such an extent that revocation of charter is compatible with the best interests of this State Society. Petition for the revocation of charter of any component County Society may be filed with The Council by a Councilor of the district within which each Society is located, or by any three members of The Council of this State Society or by the President of this State Society. Such petition shall be in writing and set forth with reasonable particularity the matters complained of and upon which the petition is founded. A copy of such petition together with written notice of the time and place of hearing on the petition shall be served on the affected component County Society by registered mail, return receipt requested, not less than 60 days before the date of such hearing. The affected component County Society may, within 30 days after service upon it of copy of the petition, file with The Council by registered mail, return receipt requested, a written answer thereto. The Council shall afford the affected component County Society a fair hearing of the matters complained of and a suitable opportunity to present its defense. The component County Society may be represented by legal counsel. Written arguments may be filed on behalf of the affected component County Society and by the petitioner. Stenographic notes shall be made of the entire proceedings on such hearing and a complete record shall be prepared, which record shall consist of the petition, answer, testimony, exhibits, written arguments and other pertinent matter. The Council shall make its decision based on the records, setting forth in writing its finding of facts, conclusions and reasons therefor. If two-thirds of the members of The Council do not concur in the conclusion that the charter of the affected component County Society should be revoked, the petition shall be deemed dismissed and the proceedings ended. If two-thirds of the members of The Council concur in the conclusion that the charter of the affected component County Society should be revoked, the Chairman of The Council shall transmit to the House of Delegates a report, consisting of the decision of The Council with all records annexed, and shall serve a copy thereof on the affected component County Society. The House of Delegates shall at the next regular or special session thereof following the transmittal of such report, consider and take

such action on the report as it may deem proper. In case the House of Delegates desires further proofs in relation to the issues involved, it may remand the matter to The Council for further hearing and report. The action of the House of Delegates on the report of The Council shall be the final decision with reference to the revocation of the charter of a component County Society. Provided, that the component County Society, if it feels aggrieved by the decision of the House of Delegates, may, within six months, appeal to the Judicial Council of the American Medical Association, whose opinion shall be final.

CHAPTER 2—REGULATION OF MEMBERSHIP

Section 1. Each component County Society shall be the judge of the qualifications of its own members; but, as such societies are the only portals to this State Society and the American Medical Association, each reputable practitioner of medicine who meets the requirements specified in the By-Laws, Chapter V, shall be eligible to active membership.

Sec. 2. A Doctor of Medicine whose principal location of practice is near a county line may hold his membership in that component County Society most convenient for him to attend, on permission of The Council of the Michigan State Medical Society.

Sec. 3. Each component County Society shall have general direction of the affairs of the profession in the county, and its influence shall be exerted constantly for bettering the scientific, the moral and material conditions of every Doctor of Medicine in the county; systematic effort shall be made by each member and by the component County Society as a whole to increase the membership until it embraces every eligible Doctor of Medicine in the county.

Sec. 4. The Secretary of each component County Society shall keep a roster of its members and if practicable a list of non-affiliated Doctors of Medicine in the county, and other Doctors of Medicine, such as commissioned officers of the Navy, Army, and Public Health Service, in which shall be shown the full name, the address, the college and date of graduation, the date of license to practice in this State, and such other information as may be deemed necessary.

Sec. 5. Each member of a component County Society, who is in good standing, shall be privileged to attend each meeting and take part in all the proceedings and shall be eligible to any office within the gift of the Society except as otherwise provided.

Sec. 6. In addition to the qualifications specified in their respective Constitution and By-Laws, County Societies shall exact as qualifications for membership and its continued tenure, the acceptance and adherence to the Principles of Medical Ethics of the American Medical Association in accordance with the interpretation thereof by the Judicial Council of the American Medical Association, and such other qualifications as may be provided by this Constitution and By-Laws.

Sec. 7. No member who is under sentence of suspension or expulsion from any component County Society of

this State Society, or whose name has been dropped from its roll of members, shall be entitled to any of the rights or benefits of this State Society.

CHAPTER 3—ARREARS IN DUES

Section 1. Any member in arrears for dues in the amount for one year may regain membership by paying up all back dues. Any member in arrears for more than one year may regain membership by paying all back dues or by being elected again to membership, at the option of the Component County Society.

Sec. 2. For the purpose of determining the dues for new members only, the fiscal year of the Michigan State Medical Society shall be divided into four three-month periods. New members shall pay adjusted annual dues and assessments for the unexpired quarterly periods of that year. Such new members shall not be entitled to membership benefits until their election to membership has been duly reported to the Secretary of the State Society and such benefits shall not cover any period prior to their becoming members in good standing.

CHAPTER 4—TRANSFER OF MEMBERSHIP

Section 1. Transfer of membership from one component County Society to another, occasioned by a change in location, shall be effectuated in the following manner: The member who wishes such transfer shall make application to the County Society which he wishes to join, and tendering payment of dues for the remainder of the current year, calculated to the nearest quarter.

Sec. 2. The Secretary of the component County Society to which application is made shall request certification of standing from the component County Society in which membership is held. Upon receiving such request, The Secretary of the latter society shall supply certification of good standing, provided the following requirements have been met:

- (a) All component County Society dues and assessments shall have been paid for the calendar year previous to the year in which application for transfer is made.
- (b) Full State Society dues and assessments shall have been paid for the year in which application for transfer is made.
- (c) Component County Society dues and assessments shall have been paid to cover that portion of the year in which application for transfer is made, the time being calculated to the nearest quarter.
- (d) The member shall not be under suspension or facing charges of unethical conduct.

Section 3. (a) In case the component County Society dues have been paid in full for the year, and certification of good standing is being issued, the Secretary of that component County Society shall refund component County Society dues represented by the unexpired portion of the year, calculated to the nearest quarter.

(b) Upon receipt of certification of good standing, and favorable action by the component County Society to which application has been made, the transfer of membership shall be in effect.

Sec. 4. Resignation for transfer of membership to another State Society shall be effectuated in the following manner:

Any member in good standing, not facing charges of unethical conduct, whose State and component County Society dues and assessments are not in arrears, and who has moved his principal location to another State, may tender his resignation, which shall be effective at the beginning of the next quarter. Such resignation shall be transmitted to the Secretary of the Michigan State

Medical Society, who shall give the departing member certification of good standing.

Provided the portion of the calendar year following such resignation is not less than one-quarter, the Secretaries of the State and component County Societies shall refund any dues and assessments already paid for the remainder of the year, calculated to the nearest quarter.

CHAPTER 5—MEMBERSHIP AND CLASSIFICATION OF MEMBERSHIP

Section 1. Active Member—Active Members shall comprise all the active members of component County Societies. To be eligible for active membership in any component County Society, a Doctor of Medicine must hold an unrevoked license to practice medicine, surgery and midwifery by authority of the Michigan State Board of Registration in Medicine, and comply with all other provisions of this Constitution and By-Laws.

Sec. 2. Honorary Member—Component County Societies may elect as an Honorary Member any person distinguished for his services or attainments in medicine or the allied sciences, or who has rendered other services of unusual value to organized medicine or the medical profession. Upon recommendation of a component County Society, the House of Delegates may elect such a person as Honorary Member of the State Society. An Honorary Member shall pay no dues to the State Society and shall be without right to vote or hold office in either component County or State Society.

Sec. 3. Associate Member—Component County Societies may elect as an Associate Member:

- (a) Any person not a member of the profession but engaged in scientific or professional pursuits whose principles and ethics are consonant with those of this State Society.
- (b) An intern serving the first year in any approved hospital, an intern of longer standing, a resident physician in training, and a teaching fellow not engaged in private practice, but not after six years from the receipt of first medical degree (M.D. or M.B.); provided his training has not been interrupted by exigencies of War Service or by totally incapacitating illness. Such intern, resident or teaching fellow may become an Associate Member of the Michigan State Medical Society without action of the House of Delegates provided he has been certified to the Michigan State Medical Society through formal application to the Michigan State Medical Society Secretary by his component County Medical Society.
- (c) A Doctor of Medicine, resident of the State of Michigan, for the period of time he is in active Military Service of the United States previous to his engaging in active practice.
- (d) A Doctor of Medicine not engaging in any phase of medical practice.
- (e) A commissioned medical officer of the United States Army, Navy, Public Health Service or physician employed by the Veterans Administration on duty in this State, who is not engaged in private practice of medicine, not to exceed two years.
- (f) An Active Member, by transfer, for the period of time he is temporarily out of active practice on account of protracted illness, provided his dues are paid for the year previous to the onset of illness.
- (g) An Active Member, by transfer, for the period of one year while he is temporarily out of practice on account of postgraduate medical studies, provided his membership dues are paid to the end of the preceding calendar year. This may be renewed upon petition to The Council at its discretion.

Upon recommendation of a component County Society, the House of Delegates may elect such a person as an Associate Member of this State Society. An Associate Member shall not pay dues to this State Society and shall not have the right to vote, nor hold office in either component County or State Society. Component County Societies may require any Associate Member to pay certain local dues, out of which THE JOURNAL of the Michigan State Medical Society subscription is to be paid to the State Society for which each such Associate Member shall receive THE JOURNAL of the Michigan State Medical Society.

Sec. 4. Retired Member—A member who has maintained membership in a component County Society of this State Society for a period of ten or more years, and having retired from practice, may be transferred to the retired member's roster, provided his membership dues are paid to the end of the preceding calendar year. He shall be entitled to receive THE JOURNAL of the Michigan State Medical Society at such rates as The Council may determine. He shall have the right to vote and hold office.

Sec. 5. Non-Resident Member—Component County Societies may elect as a Non-Resident Member any Doctor of Medicine residing and practicing outside of The County who is a member in good standing of his own component County Society. A Non-Resident Member shall not have the right to vote or hold office.

Sec. 6. Life Member—A Doctor of Medicine who has attained the age of seventy years or has been in practice fifty years and has maintained an active membership in good standing for twenty-five years in any constituent state society with dues paid for the previous calendar year may, upon his application, and recommendation of his component County Society, be transferred to the Life Members' Roster. He shall have the right to vote and hold office but shall pay no dues to the State Society. Requests for such transfer shall be accompanied by certification of the Secretary of the State Society as to years of membership in good standing. He shall be entitled to receive THE JOURNAL of the Michigan State Medical Society at such rates as The Council may determine.

Sec. 7. Military Members. Any active member in good standing who serves on active duty in the military forces of the United States during a war or similar national emergency may be transferred to the Military Membership roster for the period of time he is in Service. A Military Member shall not be required to pay state dues and assessments during the period of his Service and for the balance of the year in which he is separated from Military Service provided that this remission of postservice dues and assessments shall not be less than six months, or during the years he may be totally disabled immediately following such duty.

Sec. 8. For Retired, or Life Membership, the Component County Society of such members shall make request for certification, in writing, to the Secretary of the State Society thirty days in advance of an Annual Session of The House of Delegates. Requests for transfer shall be accompanied by certification of the Secretary of the State Society, as to years of practice and years of membership in good standing. Transfers shall be by election in the House of Delegates.

Sec. 9. Any change in membership status shall be effected by resolution presented in triplicate before the annual session of the House of Delegates after previous certification by the secretaries of the county and state societies.

CHAPTER 6—DISCIPLINE OF MEMBERSHIP

Section 1. A component County Society may expel, suspend or otherwise discipline any of its members in accordance with the provisions of its constitution and by-laws; provided, however, that any member against whom such action is proposed shall be accorded the benefit of the following procedures:

Sec. 2. Efforts at conciliation and adjustment of differences shall precede formal complaint against a member sought to be disciplined.

Sec. 3. Petition for expulsion, suspension or other discipline of a member shall be in writing, signed by the majority of the Ethics Committee of his component County Society or by not less than 10 per cent of the members of the Society, and shall set forth with reasonable particularity the matters complained of.

Sec. 4. A copy of the petition, together with notice of the time and place of hearing shall be served on the affected member not less than 30 days prior to the date of hearing. This notice is to be sent by registered mail, return receipt requested.

Sec. 5. The affected member may file with his component County Society, or a suitable committee thereof, a written answer within fifteen days after service upon him of a copy of such petition. He shall be accorded a fair hearing of the matters complained of before the Ethics Committee of his component County Society and afforded an opportunity to present his defense, either in person or by counsel.

Sec. 6. In the event that a hearing shall have been had before an appropriate committee of a component County Society as provided in Section 5, Chapter 6 of these By-Laws, such committee promptly after the conclusion of said hearing shall make a report in writing to the component County Society, setting forth its finding of facts, conclusions and reasons therefor, as well as its recommendations for an appropriate order to be made by the component County Society in relation to the matter heard by such committee.

Sec. 7. A stenographic record shall be made of the proceedings at the hearing, and in case an appeal is taken by such member, a transcript thereof shall be prepared at the expense of the component County Society for transmittal, if required, to the State Society. In such case, a copy of the transcript shall be furnished to the appellant as soon as may be.

Sec. 8. Any order of a component County Society for expulsion, suspension or other discipline of a member shall be in writing, and shall set forth findings of fact, conclusions and reasons therefor. A copy of such order shall be served on the affected member as soon as may be.

Sec. 9. The Ethics Committee may reprimand or counsel a member; however, discipline must be meted out by the Society as a whole or its Council. A two-thirds vote of the members present of the component County Society or its Council, due notice having been given, is necessary for expulsion or suspension of a member.

Sec. 10. The affected member shall have an opportunity to avail himself of his rights of further appeal according to the following procedure: Appeal to The Council of this State Medical Society; appeal to the House of Delegates of this State Medical Society; and final appeal to the Judicial Council of the American Medical Association. A member deeming himself aggrieved by an order of expulsion, suspension or other discipline made by a component County Society Council may appeal to his component County Society.

Sec. 11. Notice of appeal to The Council of the Michigan State Medical Society shall be in writing and set forth the specific reasons for such appeal. The notice shall be filed with said Council and a copy thereof served on the member's component County Society. Unless such appeal is taken within 30 days after service by registered mail, return receipt requested, of the copy of the order of discipline on the affected member, such order shall be final and effective. As soon as practicable after receiving copy of notice of appeal, the component County Society shall forward to The Council of the Michigan State Medical Society a complete record of the case, which record shall consist of the petition, answer, testimony, order

appealed from, and all other pertinent writings and exhibits. The Council shall thereon transmit such record together with the notice of appeal to the Committee on Ethics of this State Society for review. The Committee on Ethics shall promptly review the record and may request the component County Society or the affected member to furnish each further proof in writing as the Committee deems necessary for the proper and full review of the matter. Written arguments may be filed by the component County Society and the affected member within such time as may be designated by the Committee on Ethics. The Committee on Ethics shall make its findings and recommendations in writing and report the same to The Council of the Michigan State Medical Society. The Council shall thereupon, after careful hearing, orally and/or in writing, and consideration of facts and exhibits, affirm, reverse or modify the order appealed from by written decision, a copy whereof shall be served on the component County Society and the affected member. Unless, within 60 days of the service upon him and his component County Society by registered mail of copy of such decision, the member or the component County Society takes a final appeal to the Judicial Council of the American Medical Association, the decision of The Council of the Michigan State Medical Society shall be final and effective.

Sec. 12. A member of a component County Society whose license to practice medicine in this State has been revoked shall be dropped from membership automatically as of the date of revocation.

CHAPTER 7—GENERAL MEETINGS

Section 1. During each Annual Session the Society shall hold one or more General Meetings. The number and time of these General Meetings shall be determined by The Council of the Michigan State Medical Society. Such General Meetings shall be presided over by the President or in his absence the President-Elect or the Chairman of The Council. One such meeting shall be called "Officers Night." At this meeting called "Officers Night," the report of the House of Delegates shall be rendered.

Sec. 2. The following shall be the items of business:

1. Call to Order.
2. Announcements and reports of the House of Delegates.
3. Retiring President's annual address.
4. Induction into office of incoming President.
5. Introduction of newly elected officers and elected representatives.
6. Special addresses.
7. Resolutions and motions.

Sec. 3. Each registered member at an Annual Session shall have an equal right to participate in the deliberations of a General Meeting and each Active Member, and Life Member so registered shall have the right to vote on pending questions before the General Meeting.

Sec. 4. At any General Session or at any Section Meeting of this State Society, there may be recommended to the House of Delegates or to The Council the appointment of committees or commissions for scientific investigation of special interest and importance to the profession and the public. Such investigations and reports shall not become official action or expression of this State Society until approved by the House of Delegates or The Council.

CHAPTER 8—HOUSE OF DELEGATES

Section 1. Composition—The House of Delegates shall be composed of Members elected by the Com-

ponent County Societies. Reports having been properly filed with the Secretary of this Society, each component County Society shall be entitled to send to the House of Delegates each year one delegate for each fifty voting members, active, life and retired, and one delegate for each additional major fraction thereof. Any component County Society having less than fifty members shall be entitled to send one delegate.

Sec. 2. Officers of this State Society and members of The Council shall be ex-officio members of The House of Delegates, and, with the exception of the Speaker and Vice Speaker of The House of Delegates, shall be without power to vote in The House of Delegates. The Past President shall be a member at large of The House of Delegates during the first year of Past-Presidency with right to vote and hold office. All other Past-Presidents shall have the privilege of the floor, without the right to vote.

Sec. 3. The House of Delegates shall transact all of the business of this State Society not otherwise specifically provided for; it shall adopt rules and regulations for its own government and for the administration of the affairs of The Society; it shall provide for the organization of Councilor Districts.

Section 4. The House of Delegates shall meet annually at the time and place of the meeting of this State Society as a whole, as when it meets in General Session, and may hold such number of meetings as the House may determine or its business require, recessing from day to day as may be necessary to complete its business and specifying its own time for the holding of its meetings. The House of Delegates may also be called into session at any time by the Speaker upon a two-thirds vote of The Council, or on petition of twenty-five per cent of the delegates. The purpose of such special sessions shall be stated in the notice to call.

Sec. 5. A Delegate must have been a qualified member of this State Society for at least two years preceding election.

Sec. 6. A Delegate once seated shall remain a Delegate throughout the entire session and for one year thereafter until the next Session of this House of Delegates, and his place shall not be taken by any other Delegate or Alternate, provided that in case of emergency the House of Delegates may seat a duly accredited Alternate from his component County Society. Any Delegate-Elect not present to be seated at the hour of call of the first meeting may be replaced by the accredited Alternate next on the list as certified by the Secretary of the component County Society involved.

Sec. 7. The Secretary of component County Societies shall certify to the Secretary of this State Society the names of Delegates and Alternates who shall represent them at any Annual or Special Session. Each component County Society shall elect Alternate Delegates in equal number to the number of Delegates and designate their seniority.

Sec. 8. A quorum of the House of Delegates shall be constituted by not less than 40 per cent of the accredited Delegates, providing that a majority of such quorum shall not come from any one component County Society.

Sec. 9. The officers of the House of Delegates shall be a Speaker and Vice Speaker. The Secretary of this State Society, elected by The Council, shall be the Secretary of the House of Delegates. The Speaker and Vice Speaker shall be elected by the House of Delegates at the Annual Session. The Speaker of the House of Delegates shall be a member of The Council and of its Executive Committee with right to vote.

Sec. 10 (a) The House of Delegates is the legislative body of this State Society, and shall have authority to adopt and institute such methods and measures as it

may deem most sufficient for the upbuilding and establishing of the interest of the profession in Michigan.

(b) It shall concern itself with and advise as to the interests of the profession and of the public in those matters of legislation pertaining to medical education, medical registration, medical laws and public health.

(c) It shall be active in the education of the public in regard to medical research and scientific medicine.

(d) Delegates and Alternate Delegates to the American Medical Association shall be elected in accordance with the regulations of that parent organization and as hereinafter provided. They shall hold office for two years.

At each annual election, candidates for Delegates to the House of Delegates of the American Medical Association shall be nominated in number equal to or greater than the number to be elected that year. Election shall be by ballot. The required number of high candidates shall be declared elected.

In case of a tie vote of high candidates, the winner, or winners, shall be decided by drawing lots; supervised by the Speaker of the House of Delegates; provided, however, that any candidate thus tied shall have the right to a decision by ballot if he requests same.

The number of Alternate Delegates shall equal the number of Delegates. They shall be elected in exactly the same manner after all Delegates have been elected.

Alternate Delegates shall have relative seniority according to the respective number of votes received by them, and such seniority shall be designated at the time of election. Alternate Delegates serving their second year shall hold seniority over those Alternate Delegates serving their first year in office.

Any vacancies caused by failure or inability of any Delegates to attend shall be assigned to Alternate Delegates in order of their seniority as defined in this section.

(e) It shall have the authority to appoint committees, standing or special, from among its members or other doctors not members of the House of Delegates. Such committees will report to the House of Delegates and their members may participate in the debate upon their committees' report, regardless of membership in the House of Delegates.

(f) It shall approve each action and resolution in the name of this State Society before the same shall become effective. Provided, that in the interim, in the presence of necessity for prompt action, The Council or the Executive Committee of The Council is empowered to act on behalf of this State Society.

(g) It shall elect the Councilors upon the nomination of the Delegates of the Councilor District whose Councilor's term expires, as hereinafter provided.

Component county societies of Councilor Districts shall be notified in writing by the Secretary of the State Society 60 days in advance of the annual session when a Councilor is to be elected from their District at the expiration of the usual term.

If a vacancy in The Council occurs during an annual session of the Michigan State Medical Society the delegates of the component county societies will be given time in which to conduct a caucus in order to consider nomination(s) for the vacancy.

If a vacancy occurs on The Council other than at the time of the Annual Session, all the component societies in the affected Councilor District shall be notified in writing of the vacancy, and their recommendation as to a successor shall be sought. Response to this notification, shall be forthcoming from the county society within thirty days of receipt of notification. After receipt of these recommendations, the President of the MSMS shall appoint a successor to fill the unexpired term.

(h) The House of Delegates shall provide for the division of the scientific work of the Society into appropriate sections adding new and discontinuing old sections. It shall prescribe the rules governing the meetings of these sections and the election of officers.

(i) It shall present a summary of its proceedings at a General Meeting of the Society and publish its minutes in THE JOURNAL of the Michigan State Medical Society.

(j) It may have the following reference committees, together with Tellers and Sergeant-at-Arms, appointed by the Speaker of the House and approved by the House of Delegates, and such other reference committees as may be necessary from time to time:

1. Credentials.
2. Reports of Council.
3. Reports of Officers.
4. Reports of Standing Committees.
5. Reports of Special Committees.
6. Constitution and By-Laws.
7. Resolutions.
8. Rules and Order of Business.
9. Legislation and Public Relations.
10. Hygiene and Public Health.
11. Executive Session.
12. Medical Service and Prepayment Insurance.
13. National Defense and Disaster Planning.
14. Miscellaneous Business:
Tellers
Sergeant-at-Arms

(k) No new business shall be introduced in the last meeting of the House of Delegates without unanimous consent of the Delegates except when presented by The Council. All new business so presented shall require three-fourths affirmative vote for adoption.

(l) Election of officers shall be held at the last meeting of the House of Delegates at the Annual Session. Each nomination shall be made from the floor of the House. In the event of having only one nominee, the candidate may be elected by a viva voce vote. Members elected to office shall take office with the induction of the Incoming President, as provided in this Constitution and By-Laws.

(m) Each resolution introduced into the House of Delegates shall be in writing and presented in triplicate to the Secretary, immediately after the Delegate has read the same, and shall be referred to the proper reference committee by the Speaker before action thereon is taken.

(n) Robert's Rules of Order, when not in conflict with this Constitution and By-Laws, shall govern the parliamentary proceedings of the House of Delegates.

CHAPTER 9—THE COUNCIL

Section 1. The Council is the Executive Body of this State Society. It shall determine its own time and place of meeting. It shall hold an Annual Meeting at which time it shall elect to serve for one year its Chairman, Vice Chairman, a Secretary, Chairman of the Finance Committee, Chairman of the County Societies Committee, and Chairman of the Publication Committee; these with the President, the President-Elect, and the Speaker of the House of Delegates shall constitute the Executive Committee of The Council.

Sec. 2. Each Councilor shall be the organizer, peace maker and censor for his District. He shall visit each component County Society in his District at least once a year and keep in touch with the activities of the societies constituting his District. He shall make such reports as the Chairman of The Council shall request concerning the condition of the profession in that District.

Sec. 3. Upon written complaint of at least half of the Delegates of the Councilor District involved, presented to the House of Delegates, in regular or special session stating that the Councilor of said District has been remiss in his duties as prescribed above, and has been notified a month previously of this proposed action, the Speaker of the House shall bring the matter before the House of Delegates for consideration. On two-thirds vote of the House of Delegates this office shall be declared vacant and a successor elected.

Sec. 4. It shall make careful inquiry into the con-

dition of the profession in each county in the State, and shall have authority to adopt such methods as may be deemed most efficient for building up and increasing the interest in such component County Societies as already exist. It shall especially and systematically endeavor to promote friendly intercourse between Doctors of Medicine in the same locality. It shall make every effort to bring each reputable Doctor of Medicine in the State under the Society's influence.

Sec. 5. It shall, upon application, provide and issue charters to component County Societies organized in conformity with this Constitution and By-Laws. It shall revoke such charters when deemed necessary, as provided in this Constitution and By-Laws.

Sec. 6. The Council shall direct and control the publication of THE JOURNAL of the Michigan State Medical Society.

Sec. 7. The Council shall elect an Editor of THE JOURNAL of the Michigan State Medical Society, and a Treasurer at its annual meeting. They shall take office immediately and serve for a term of one year, or until their successors are elected and have taken office.

Sec. 8. The funds of the Society shall be disbursed only by order or action of The Council. This authority may be delegated to the Executive Committee of The Council by The Council.

Sec. 9. Funds of the Society for investment shall be delivered to the custody of the Treasurer by the Secretary.

Sec. 10. The Council shall provide such headquarters for The Society as may be required to conduct its business properly.

Sec. 11. The Council shall render an Annual Report to the House of Delegates.

Sec. 12. The following County Societies shall constitute the Councilor Districts of the State. Wayne County shall constitute four Councilor Districts without permanent set boundaries within that County.

First District—Wayne

Second District—Clinton, Eaton, Hillsdale, Ingham, Jackson

Third District—Branch, Calhoun, St. Joseph

Fourth District—Allegan, Berrien, Cass, Kalamazoo, Van Buren

Fifth District—Barry, Ionia-Montcalm, Kent, Ottawa

Sixth District—Genesee, Shiawassee

Seventh District—Huron, Sanilac, Lapeer, St. Clair

Eighth District—Griatiot-Isabella-Clare, Midland, Saginaw, Tuscola

Ninth District—Grand Traverse-Leelanau-Benzie, Manistee, Northern Michigan (Antrim, Charlevoix, Cheboygan and Emmet, combined), Wexford-Missaukee.

Tenth District—Alpena-Alcona-Presque Isle, Bay-Arenac-Iosco, North Central Counties (Otsego, Montmorency, Crawford, Oscoda, Roscommon, Ogemaw, Gladwin and Kalkaska, combined).

Eleventh District—Mason, Mecosta-Osceola-Lake, Muskegon, Newaygo, Oceana

Twelfth District—Chippewa-Mackinac, Delta-Schoolcraft, Luce, Marquette-Alger.

Thirteenth District—Dickinson-Iron, Gogebic, Houghton-Baraga-Keweenaw, Menominee, Ontonagon.

Fourteenth District—Lenawee, Livingston, Monroe, Wash-tenaw

Fifteenth District—Macomb, Oakland

Sixteenth District—Wayne

Seventeenth District—Wayne

Eighteenth District—Wayne

CHAPTER 10—STANDING COMMITTEES

Section 1. The following Standing Committees shall be appointed by the President with the advice of The Council:

- (a) Committee on Postgraduate Medical Education
- (b) Committee on Preventive Medicine and its Sub-Committees
- (c) Committee on Public Relations and its Sub-Committees
- (d) Committee on Ethics
- (e) Committee on Legislation

Sec. 2. The Committee on Postgraduate Medical Education shall consist of a Chairman and twelve members, four of whom shall be appointed each year to serve for a three-year term.

The duty of this committee shall be to supervise for the Michigan State Medical Society all postgraduate medical training in the State and, with the approval of the Executive Committee of The Council, make any changes, additions or discontinuances of present programs and initiate such new programs as they deem advisable.

Sec. 3. Committee on Preventive Medicine shall consist of its Chairman, the State Health Commissioner, and Chairmen of the following committees:

- Committee on Rheumatic Fever Control
- Committee on Cancer Control
- Committee on Maternal Health
- Committee on Venereal Disease Control
- Committee on Tuberculosis Control
- Committee on Industrial Health
- Committee on Mental Health
- Committee on Child Welfare
- Committee on Geriatrics.
- Committee on Postgraduate Medical Education

Such other committees as may, from time to time, be appointed to study and develop programs dealing with specific diseases.

The duty of this committee shall be to collect, analyze and distribute information on preventive medicine, and to advise medical and other groups or individuals concerning problems in preventive medicine and public health.

Sec. 4. The Committee on Public Relations shall be appointed by the President. It shall be the duty of this committee: (a) to integrate and publicize all approved plans and projects emanating from The Council, the Executive Committee, and other Standing and Special Committees of the Michigan State Medical Society; (b) to consider all plans and projects, and make suggestions and recommendations for improving or changing such plans for integration and publicizing; (c) to develop further plans for better physician-public contacts. The President shall appoint such Sub-Committees of this committee as are required in the execution of its work.

Sec. 5. The Committee on Ethics shall consist of eight members appointed by the President with the advice of The Council, each member to serve for a four-year term, so staggered that two members are selected annually. In case a vacancy occurs before the expiration of a member's term, the President shall appoint a successor to serve the unexpired portion of the term. The Committee shall render advisory opinions on questions of ethics submitted to it by The Council. On request of The Council it shall conduct an investigation, under rules approved by The Council, concerning the ethical conduct of a designated member of this State Society and report its findings to The Council in accordance with these By-Laws.

Sec. 6. The Committee on Legislation shall consist of a Chairman, the President-Elect of this State Medical Society and the Chairman of The Council of this State Medical Society and members to be appointed by the President.

The Committee on Legislation shall utilize every organ-

ized influence of the profession for the promoting of such legislation as will be for the best interests of the public's health and that of scientific medicine. It shall work under the direction of the House of Delegates or The Council when the House of Delegates is not in session. No bill or proposed law or amendment shall be delivered to any member of The Michigan State Legislature for introduction in the name of this State Society or by any of its committees until such proposed legislation shall have been endorsed and approved by The Council. (Provided this latter authority may be delegated to the Executive Committee of The Council by The Council.)

It shall submit an annual report with recommendations to The House of Delegates.

CHAPTER 11—OFFICERS

Section 1. Officers shall be installed at the General Meeting at which the reports of the House of Delegates are received. They shall serve until the next Annual Session, provided that Councilors shall serve for five years, and provided further that not more than four Councilor terms shall expire normally at any Annual Session; provided further that Delegates to the American Medical Association shall serve for two years; provided further that not more than three Delegates to the American Medical Association shall be elected in any one year.

Sec. 2. Officers shall serve until their successors are elected and inducted into office.

Sec. 3. At the Annual Session of this State Society, next following his election, The President-Elect shall be installed into and assume the office of the President. He shall serve until his successor takes office. The assumption of office shall occur in a General Session of the Society as a whole, at which the report of the House of Delegates is received. If no General Meeting is held at the Annual Session, the induction into office of the Incoming President and the newly elected officers and representative officials shall be in the last meeting of the Annual Session of the House of Delegates.

Sec. 4. The President shall preside at the General Meeting of the Society at which the reports of the House of Delegates are received, and shall fill vacancies in office and committees with the advice of The Council, unless otherwise provided for; he shall appoint the members of each committee not otherwise provided for; he shall deliver the President's address; he shall have a voice in the deliberations of the House of Delegates and he shall be an ex-officio member of The Council with the right to vote.

Sec. 5. The President-Elect shall be a member of The Council and the Executive Committee of The Council ex officio, and shall have the right to vote, and shall act for the President in his absence or disability. If the office of President shall become vacant, the President-Elect shall succeed to the presidency. If the office of President shall again become vacant, The Council, at a Special Session, shall elect a President for the unexpired term.

Sec. 6. The Treasurer shall be the custodian of all the invested funds and the securities of the Society. He shall be accountable through The Council to the Society. The Council shall cause an annual audit of his accounts to be made. He shall be bonded in amount considered sufficient by The Council, the bond to be paid from the funds of the Michigan State Medical Society.

Sec. 7. The Secretary shall be an active member of the Michigan State Medical Society and shall be paid a salary to be determined by The Council. He shall be the recording officer of the House of Delegates, The Council, Scientific Assembly and Annual Session. He shall be bonded in amount considered sufficient by The Council, the bond to be paid from the funds of the Michigan State Medical Society. He shall also discharge the following duties:

(a) Collect all annual membership dues, assessments, donations and such other monies as may be due to the Society; keep membership records and issue membership certificates.

(b) He shall make all required reports to the American Medical Association. He shall make a report of the proceedings of the House of Delegates to the Annual Meeting of this State Society.

(c) He shall deposit all funds received in an approved depository and disburse them upon order of The Council. The Council may delegate the authority for disbursing funds to the Executive Committee of The Council. The Council shall cause an annual audit of his accounts by a certified public accountant. He shall render a report to The Council reviewing the Society's activities and imparting recommendations for the advancement of the Society's interests at each meeting of The Council.

(d) Under the direction of The Council and with the advice of the Editor, he shall be the business manager of THE JOURNAL OF THE MICHIGAN STATE MEDICAL SOCIETY.

(e) He shall superintend all arrangements for the holding of each meeting in compliance with the Constitution and By-Laws and instructions of The Council or its Executive Committee.

(f) He shall send out all official notices of meetings, committee appointments, certificates of election to office and special duties of committees.

(g) He shall receive and transmit to the House of Delegates and to The Council each committee and officer's annual report.

(h) He shall institute and correlate each new activity under the supervision of The Council or its Executive Committee, and shall work on component County Society integration and furnish information to the public concerning health matters as directed by the President and The Council.

Sec. 8. There shall be an Executive Director, not necessarily a Doctor of Medicine or a member of the Michigan State Medical Society, who shall be appointed by The Council at its Annual Meeting and shall be remunerated by a salary which shall be fixed by The Council.

The Secretary shall, with the approval of The Council, assign duties to the Executive Director as he deems advisable.

Sec. 9. The Speaker of the House of Delegates shall preside at sessions of the House of Delegates. He shall, with the approval of the President, appoint all committees created by the House of Delegates, unless otherwise provided, and shall perform such duties as custom and parliamentary usage require. He shall be a member of The Council and of its Executive Committee with the power to vote.

Sec. 10. The Vice Speaker shall assume the Speaker's duties in the Speaker's absence in the House of Delegates and such other times as the House of Delegates or The Council shall determine.

CHAPTER 12—REFERENDUM

Section 1. At any General or Special Session of this State Society as a whole, as when it meets in General Session, it may by a two-thirds vote order a general referendum upon any question pertinent to the purposes and objects of the Michigan State Medical Society, organized medicine, or health of the public; provided, however, that a quorum at such General or Special Meeting shall consist of 300 members of the Michigan State Medical Society who are in good standing.

Sec. 2. The House of Delegates, by a majority vote may submit any question pertinent to the community and organized medicine to the membership of the Society for its vote, such vote to be taken by County Societies

and certified by their secretaries to the State Society Secretary. Two-thirds of the vote cast shall be required to carry the question.

CHAPTER 13—SEAL

Section 1. The Society shall have a common SEAL. The power to change or renew the seal shall rest with The Council.

CHAPTER 14—EMERGENCY

Section 1. When prompt speech and action are imperative, authority to speak and act in the name of this State Society is vested in The Council or the Executive Committee of The Council of this State Society.

CHAPTER 15—DUES

Section 1. The Secretary of each component County Society shall collect and forward the dues and assessments to the Secretary of the Michigan State Medical Society on or before April first of each year.

Sec. 2. Any member in arrears after April 1 of each official year shall stand suspended until his name is properly recorded and his dues and assessments for the current year properly remitted, unless his name is to be submitted for election to one of the special memberships listed in Chapter 5 at the next succeeding Annual Session of the House of Delegates.

Sec. 3. Any component County Society which fails to make the reports required at least thirty days before the Annual Session of this State Society shall be held suspended and none of its members or Delegates shall be permitted to participate in any of the proceedings of the Society or of the House of Delegates.

CHAPTER 16—ELECTION—COMPONENT COUNTY SOCIETIES

Section 1. At the Annual Meeting of each component County Society or at a designated meeting of which ample notice has been given, each component County Society shall elect Delegates and Alternate Delegates in conformity with the provisions of this Constitution and By-Laws to represent the component County Society in the House of Delegates of this State Society. The Secretary of the component County Society shall immediately send a list of its Delegates and Alternate Delegates to the Secretary of this State Society.

A Delegate, or in his absence, the Alternate Delegate, becomes a member of the House of Delegates when properly registered and seated at the Annual or Special Session following his election by the component County Society.

CHAPTER 17—DEFINITION OF SESSION AND MEETING

Section 1. A session shall mean all meetings at any one call.

Sec. 2. A meeting shall mean each separate convention at any one session.

CHAPTER 18—AMENDMENTS

Section 1. These By-Laws may be amended by a majority vote of the Delegates seated, after the proposed amendment is laid on the table for one meeting of the House of Delegates. These By-Laws become effective immediately upon adoption.

COUNCILOR DISTRICTS

First District—Wayne

Second District—Clinton, Eaton, Hillsdale, Ingham, Jackson

Third District—Branch, Calhoun, St. Joseph

Fourth District—Allegan, Berrien, Cass, Kalamazoo, Van Buren

Fifth District—Barry, Ionia-Montcalm, Kent, Ottawa

Sixth District—Genesee, Shiawassee

Seventh District—Huron, Sanilac, Lapeer, St. Clair

Eighth District—Griatiot-Isabella-Claire, Midland, Saginaw, Tuscola

Ninth District—Grand Traverse-Leelanau-Benzie, Manistee, Northern Michigan (Antrim, Charlevoix, Cheboygan and Emmet, combined), Wexford-Missaukee.

Tenth District—Alpena-Alcona-Presque Isle, Bay-Arenac-Iosco, North Central Counties (Otsego, Montmorency, Crawford, Oscoda, Roscommon, Ogemaw, Gladwin and Kalkaska, combined)

Eleventh District—Mason, Mecosta-Osceola-Lake, Muskegon, Newaygo, Oceana

Twelfth District—Chippewa-Mackinac, Delta-Schoolcraft, Luce, Marquette-Alger

Thirteenth District—Dickinson-Iron, Gogebic, Houghton-Baraga-Keweenaw, Menominee, Ontonagon

Fourteenth District—Lenawee, Livingston, Monroe, Washtenaw

Fifteenth District—Macomb, Oakland

Sixteenth District—Wayne

Seventeenth District—Wayne

Eighteenth District—Wayne

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